United States Department of Agriculture

Final Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management Plan

Cochise, Graham, Pima, Pinal, and Santa Cruz Counties, Arizona, and Hidalgo County, New Mexico

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Front cover photos (clockwise from upper left): Upper Kielberg in the Galiuro Mountains, Sky Island Scenic Byway, Ak Chin Basketmakers, Rustler Park, Parker Canyon Lake, adobe building at Kentucky Camp, poppies in the Santa Rita Mountains, and Mexican spotted owl.

Printed on recycled paper.

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Appendix H. Crosswalk between Key Direction from the 1986 Forest Plan (as amended) and the Revised Forest Plan

This appendix provides transparency on how management direction and plan components including goals, objectives, standards, and guidelines from the 1986 forest plan were addressed in the revised plan. Relevant direction from the 1986 plan and new direction from the revised plan direction (retained or carried forward with no changes, modified, or deleted) are presented along with rationale for changes. This is not an exhaustive account of all plan direction but it highlights key decisions.

Where appropriate, related plan components are grouped. The revised plan is strategic in nature, therefore many of the standards and guidelines in the 1986 forest plan were reframed as desired conditions or broader objectives, standards, or guidelines in the revised plan. In other instances, existing plan guidance was modified or not carried forward because it reiterates existing law, regulation, or policy. Following is a key for codes and acronyms used.

Acronyms and Abbreviations
BMP: best management practice
DC: desired conditions
EMA: ecosystem management area
ESA: Endangered Species Act
FEIS: Final Environmental Impact Statement
FLPMA: Federal Land Policy and Management Act
FW: forestwide
GD: guideline
LUZ: land use zone
MA: management approach
MRNG: “Management Recommendations for the Northern Goshawk in the Southwestern United States”
PACs: protected activity centers
NEPA: National Environmental Policy Act
OBJ: objective
PFA: post-fledging family areas
RNA: research natural area
ST: standard
USFWS: U.S. Fish and Wildlife Service
WSA: wilderness study area

Forestwide Goals and Desired Conditions

Forestwide goals and desired conditions (DCs) from the 1986 plan are listed below and compared to revised forest plan direction.

Mission Statement for Management of the Coronado National Forest

1986 Plan Content: Goals and DCs

FW Goal: Manage the resources of the Coronado National Forest under multiple-use and sustained-yield principles to provide for balanced contributions to the national welfare and to the economic and social needs of the people of Southeast Arizona and Southwest New Mexico. Management programs are to be oriented to maintain cultural values and a viable rural economy. (page 9)

Revised Forest Plan Direction

The revised forest plan speaks generally to the purpose and mission of National Forest System lands and the contribution of the Coronado National Forest to that mission, as follows: The Coronado National Forest is an administrative component of the National Forest System. It administers 1,783,639 ac of National Forest System lands. National forests across the United States were established to provide natural resource-based goods and services to American citizens, and to protect timber and watershed resources. Management of national forests is jointly based on the principles of conservation and multiple use. The Coronado National Forest contributes a wide array of goods and services to its visitors and communities. (page 1)

Rationale for Change(s)

Reiterates existing law, regulation, and policy (see appendix F). Although the 1986 Forestwide mission is still relevant, the revised plan statement reflects the value and contribution of National Forest System lands, including the Coronado National Forest, to the American public as a whole.

Recreation: Multiple Use

1986 Plan Content: Goals and DCs

FW Goal: Maintain the current spectrum of developed, dispersed, and primitive recreation opportunities and increase those opportunities within the capability of the resources and the framework of this plan as needs and funds develop. (page 9)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

Rationale for Change(s)

Revised as a FW GD, including more explicit direction provided by management area.

Recreation: Public Involvement

1986 Plan Content: Goals and DCs

FW Goal: Establish a dialogue with the public to gain their understanding of our goals and objectives and insure their informed participation in our management decisions. (page 9)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Not carried forward. Public involvement in the management of National Forest System lands is required under existing law (NEPA), regulation, and policy.

1986 Plan Content: Goals and DCs

FW Goal: Work with other government agencies and private sector to secure public access to recreation resources. (page 9)

Revised Forest Plan Direction

FW MA for Recreation: Working closely and in partnership with private landowners, county, State, and other Federal agencies, third parties, interested organizations, and individuals to resolve public access issues and to ensure permanent legal public access to the various parts of the Coronado on local, county, State, or permanent National Forest System roads and trails that meet Forest Service management objectives. (page 74)

Rationale for Change(s)

Revised as a MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Recreation: Public Outreach

1986 Plan Content-Goals and DCs

FW Goal: Increase the public's awareness of their obligation to the resource and their responsibility in caring for it. (page 9)

Revised Forest Plan Direction

FW DC for Recreation: Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values. (page 77)

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

Rationale for Change(s)

Revised direction to be more explicit.

1986 Plan Content: Goals and DCs

FW Goal: Develop Information Service Programs that will educate, inform, and involve populations of southern Arizona and southwest New Mexico in management and enjoyment of the forest. (page 9)

Revised Forest Plan Direction

FW DC for Recreation: Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values. (page 77)

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

Rationale for Change(s)

Revised direction to be more explicit.

Recreation: Internal Coordination

1986 Plan Content: Goals and DCs

FW Goal: Work with Regional Office and research in development of process to establish recreation capacities. (page 9)

Revised Forest Plan Direction

FW GD for Recreation: Recreation sites should be managed for capacities that do not cause unacceptable resource damage or impact the landscape character. (page 79)

Rationale for Change(s)

Direction provided by existing regulation, policy, and other guidance.

Recreation: Partnerships

1986 Plan Content: Goals and DCs

FW Goal: Nurture partnerships with other recreation agencies, the private sector, and professional organizations, to develop a full spectrum of recreation opportunities in southern Arizona and southwest New Mexico. (page 9)

Revised Forest Plan Direction

FW MA: Encouraging local communities, partnerships, volunteers, and permit holders to help manage a sustainable recreation program, and ensuring that partners are recognized for their roles in providing recreational opportunities (page 79).

In addition, partnership strategies are described for other situations and needs under FW MAs for Recreation. (page 79)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Recreation: Visual Resources

1986 Plan Content: Goals and DCs

FW Goal: Maintain or enhance the visual resource through sound landscape management principles. (page 9)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). More explicit direction provided by this GD.

Recreation: Cultural Resources

1986 Plan Content: Goals and DCs

FW Goal: Inventory, protect, manage, and interpret cultural resources. (page 9)

Revised Forest Plan Direction

FW DC for Cultural Resources: Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance. (page 87)

FW OBJ for Cultural Resources: Complete 200 acres of nonproject inventory each year, so that the Coronado's currently unidentified cultural resources can be recorded, evaluated, and protected. (page 87)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). More explicit direction provided by this DC and OBJ.

1986 Plan Content: Goals and DCs

FW Goal: Identify, evaluate, and nominate cultural resource sites to the National Register. (page 9)

Revised Forest Plan Direction

FW OBJ for Cultural Resources: Nominate at least five individual sites or at least two districts to the National Register of Historic Places within 10 years of plan approval. (page 87)

Rationale for Change(s)

Revised as an OBJ to be more explicit. Objectives provide measurable planned results to achieve desired conditions.

1986 Plan Content: Goals and DCs

FW Goal: Provide for the active management of cultural resources to serve as a source of knowledge about the nation's cultural heritage, to provide recreational opportunities for the public, and to facilitate the management of other forest resources. (page 9)

Revised Forest Plan Direction

FW OBJs for Cultural Resources (page 87):

- Host, sponsor, or participate in at least two interpretive events for the public every year.
- Provide opportunities for volunteers to participate in heritage resource conservation activities at two to five archeological sites or historic properties every year.
- Within 10 years of plan approval, enter at least two historic sites in the Arizona "Rooms with a View" cabin rental program.

In addition, various measures related to public appreciation of cultural resources are addressed by FW MAs for Cultural Resources. (page 88)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Revised as OBJ to be more explicit. Objectives provide measurable planned results to achieve desired conditions.

1986 Plan Content: Goals and DCs

FW Goal: Protect significant cultural resources from damage by project activities or vandalism. Encourage protection of non-federally owned cultural properties located within or adjacent to National Forest boundaries. (page 9)

Revised Forest Plan Direction

FW GD for Cultural Resources: Contracts, permits, and leases that have the potential to affect cultural resources should include appropriate clauses on protection responsibilities and liability for damage. (page 87)

FW DC for Cultural Resources: Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance. (page 87)

Rationale for Change(s)

Revised direction to be more explicit. Primary direction provided by existing law, regulation, and policy (see appendix F).

Recreation: Caves

1986 Plan Content: Goals and DCs

FW Goal: Preserve and protect caves for their unique environmental, biological, geological, hydrological, archeological, paleontological, cultural, and recreational values. (page 9)

Revised Forest Plan Direction

FW DC for Biophysical Features: Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. Some caves provide a range of recreational and educational opportunities without diminishing the cave resource. (pages 54)

Rationale for Change(s)

Revised direction to be more explicit.

1986 Plan Content: Goals and DCs

FW Goal: Manage caves in partnership with caving organizations, scientists, and outdoor recreationists. (page 9)

Revised Forest Plan Direction

Various FW MAs for Biophysical Features are prescribed in the Revised Plan. Examples include coordination and engagement with State and Wildlife agencies and caving organizations, and fostering the collaboration and exchange of information with partners. (pages 55 and 56)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

1986 Plan Content: Goals and DCs

FW Goal: Interpret cave resources and provide public education for increased public understanding and awareness of the need to protect and preserve these unique ecosystems. (page 10)

Revised Forest Plan Direction

FW DC for Biophysical Features: Some caves provide a range of recreational and educational opportunities without diminishing the cave resource. (page 54)

FW GD for Biophysical Features:

- Identified bat roosts should be managed to provide for the enhancement and protection of bat populations. Protection measures may include seasonal closures, public education, and wildlife-friendly gates. (page 55)

FW MAs for Biophysical Features (page 56):

- Fostering the collaboration and exchange of information between governmental agencies, partners, and other stakeholders to address conservation, interpretation and education management for cave resources, grottos, and associated species.
- Educating the public on disease prevention "best practices" for caves. (page 54)

Rationale for Change(s)

Unclear whether the 1986 forest plan direction is a DC, ST, OBJ, or GD. Revised direction to be more explicit.

1986 Plan Content: Goals and DCs

FW Goal: Coordinate the management of cave and surface resources as a recreational opportunity. Primary emphasis is on dispersed recreation activities compatible with responsible cave management. (page 10)

Revised Forest Plan Direction

FW DC for Biophysical Features: Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. Some caves provide a range of recreational and educational opportunities without diminishing the cave resource. (page 54)

Various FW MAs for Biophysical Features. Examples include coordination and engagement with State and Wildlife agencies and caving organizations, and fostering the collaboration and exchange of information with partners. (pages 55 and 56)

Rationale for Change(s)

Revised direction to be more explicit.

1986 Plan Content: Goals and DCs

FW Goal: Provide for public health and safety while recognizing that no cave is completely safe and that risk-taking is part of the caving experience. (page 10)

Revised Forest Plan Direction

FW GD for Biophysical Features: Environments in caves and abandoned mines should not be altered except where necessary to protect associated natural resources or to protect health and safety. Where mine closure is necessary to protect human health and safety, closures should preserve habitats for roosting bats and avoid direct impacts to bats. (page 55)

Rationale for Change(s)

Cave-based and many other outdoor recreation activities on National Forest land are inherently risky. Nevertheless, public health and safety are key goals on all National Forest System lands.

Wilderness: Management

1986 Plan Content: Goals and DCs

FW Goal: Manage existing wilderness to preserve and protect the wilderness character in accordance with the various Wilderness Acts. (page 10)

Revised Forest Plan Direction

GD for Designated Wilderness Areas:

Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation. (page 103)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F).

Wilderness: Recommendations

1986 Plan Content: Goals and DCs

FW Goal: The Bunk Robinson and Whitmire Canyon Wilderness Study Areas will be recommended for nonwilderness management. The Mt. Graham Wilderness Study Area will be recommended for wilderness designation. These recommendations are preliminary recommendations that will receive further review and possible modification by the Chief of the Forest Service, the Secretary of Agriculture, and the President of the United States. Final decisions on wilderness or nonwilderness designations have been reserved by the Congress to itself. Until Congress makes a decision, the three WSAs will be managed under the direction prescribed for Management Area 9 to maintain the existing wilderness character and potential for inclusion in the National Wilderness System. (page 10)

Revised Forest Plan Direction

General Description of Recommended Wilderness Areas and Wilderness Study Areas: The Ku Chish area and Mount Graham Wilderness Study Area are recommended as wilderness (page 118). The Bunk Robinson and Whitmire Canyon Wilderness Study Areas are not being recommended for wilderness designation (page 119). Both recommended wilderness and wilderness study areas are managed to maintain their wilderness character.

Rationale for Change(s)

To allow for flexibility in managing wildlife habitat—and because their ecosystems are well represented in other Arizona wilderness areas—the Bunk Robinson and Whitmire Canyon Wilderness Areas are not being recommended as wilderness but will be managed to preserve their wilderness characteristics. Carrying forward direction from the 1986 forest plan, Mt. Graham WSA is being recommended as wilderness. The Ku Chish area was ranked high for capability and availability as potential wilderness.

Wildlife and Fish: Habitat

1986 Plan Content: Goals and DCs

FW Goal: Provide habitat for wildlife populations consistent with the goals outlined in the Arizona and New Mexico Department of Game and Fish Comprehensive Plans and consistent with other resource values. (page 10)

Revised Forest Plan Direction

Although not a plan component, this subject is addressed under Appendix B. Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with these agencies in order to carry out management activities.

Also addressed by FW MAs for Animals and Rare Plants:

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management. (page 68)

Rationale for Change(s)

Best defined as MAs. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Wildlife and Fish: Diversity

1986 Plan Content: Goals and DCs

FW Goal: Provide for ecosystem diversity by at least maintaining viable populations of all native and desirable non-native wildlife, fish, and plant species through improved habitat management. (page 10)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

Partially addressed by FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Revised as broader direction, with more explicit direction provided by resource and EMA to meet desired conditions.

Wildlife and Fish: Threatened and Endangered Species

1986 Plan Content: Goals and DCs

FW Goal: Improve the habitat of and the protection for local populations of threatened and endangered species to meet the goals of the Endangered Species Act of 1973. (page 10)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Revised direction to be more explicit.

Range: Restoration

1986 Plan Content: Goals and DCs

FW Goal: To restore rangeland to at least a moderately high ecological condition (70 to 75 percent of potential production, fair range condition) with stable soil and a static or upward trend. (page 10)

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

Rationale for Change(s)

Revised as broader direction for rangeland management, with more explicit direction by resource and EMA to meet desired conditions.

Range: Livestock Production

1986 Plan Content: Goals and DCs

FW Goal: Produce livestock products consistent with other resources and uses. (page 10)

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

Rationale for Change(s)

Revised as broader direction for rangeland management, with more explicit direction by resource and EMA to meet desired conditions.

Range: Grazing Decisions

1986 Plan Content: Goals and DCs

FW Goal: Eliminate grazing from areas not capable of supporting livestock without significant detriment to range or other resources. (page 10)

Revised Forest Plan Direction

FW DC for Range Management: The Coronado National Forest provides forage for grazing in support of domestic livestock production as a viable, sustainable economic activity. Communities surrounding the Coronado National Forest benefit from the interactions of livestock production activities with other economic sectors, and from the social, cultural, and ecological values tied to conservation ranching. (page 90)

FW SD for Range Management: Grazing permits for domestic goats and/or sheep will not be issued in the Santa Teresa, Winchester, Galiuro, and Santa Catalina Ecosystem Management Areas to prevent the transfer of disease from domestic goats and sheep to wild populations of bighorn sheep. (page 91)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

Rationale for Change(s)

Revised as broader direction for rangeland management, with more explicit direction by resource and EMA.

Range: Grazing Use

1986 Plan Content: Goals and DCs

FW Goal: Balance permitted grazing use with grazing capacity. (page 10)

Revised Forest Plan Direction

FW GD for Range Management: Forage utilization should be based on site-specific resource conditions and management objectives, but in general should be managed at a level

corresponding to light to moderate intensity (15 to 45 percent of current year's growth). Exceptions may be allowed in order to meet objectives related to scientific studies, fuels reduction, invasive plant control, or other targeted grazing or site-specific objectives. (page 91)

FW GD for Range Management: Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife. (page 91)

Rationale for Change(s)

Revised direction to be more explicit.

Timber: Production and Improvement

1986 Plan Content: Goals and DCs

FW Goal: Continue a program that enhances other resource values, and that effectively utilizes the wood fiber produced. Carry out silvicultural practices to improve stand health when such practices are consistent with other resource objectives. (page 10)

Revised Forest Plan Direction

FW DC for Forest Products: A sustainable supply of wood products (e.g., small roundwood, sawlogs, biomass, fuelwood) and other products (e.g., Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. Forest products, particularly those related to wood fiber, are made available as part of fuel treatment projects and restoration activities. (page 70)

SD for Forest Products: On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety. (page 70)

Rationale for Change(s)

Revised direction reflects availability of wood products from non-timber projects such as fuel treatments and restoration activities. The Revised Plan Timber Suitability Analysis found no lands on the Coronado National Forest to be suitable for timber production.

Soil and Water: Water Supply

1986 Plan Content: Goals and DCs

FW Goal: Secure and provide an adequate supply of water for the protection and management of the National Forest. (page 10)

Revised Forest Plan Direction

FW DC for Natural Water Sources: Water quantity and quality meet the needs of beneficial uses and authorized activities such as domestic and municipal water use, irrigation, stockwater, recreation, wildlife (including fish), road construction and maintenance, and fire management activities. (page 59)

FW OBJ for Natural Water Sources: Every 10 years, apply for at least 10 instream flow water rights on streams for recreation and wildlife purposes, prioritizing locations necessary for sustaining native fish populations and species of conservation concern. (page 59)

Rationale for Change(s)

Revised direction to be more explicit.

1986 Plan Content: Goals and DCs

FW Goal: Provide a favorable water flow in quantity and quality for off-Forest users by improving or maintaining all watersheds to a satisfactory or higher level. (page 10)

Revised Forest Plan Direction

FW DC for Watersheds: Desired conditions for watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

Rationale for Change(s)

Revised as broader direction for watershed management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.).

Minerals: Development

1986 Plan Content: Goals and DCs

FW Goal: Support environmentally sound energy and minerals development and reclamation. (page 11)

Revised Forest Plan Direction

FW DCs for Minerals:

- Opportunities for environmentally sound minerals development are available. (page 71)
- All mineral exploration and mining activities are operating in environmentally sound ways through protection and mitigation measures, including adequate post-mining reclamation assurances, to minimize environmental impacts to other national forest resources. (pages 71 and 72)

Rationale for Change(s)

Revised direction to be more explicit.

Human Resources

1986 Plan Content: Goals and DCs

FW Goal: Use human resource programs to meet the goals and objectives for resources and activities. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward from the 1986 forest plan, direction provided by existing regulations and policy (see appendix F).

Lands: Ownership Adjustments

1986 Plan Content: Goals and DCs

FW Goal: Use land ownership adjustment to accomplish resource management objectives. (page 11)

Revised Forest Plan Direction

FW DCs for Land Ownership Adjustments and Boundary Management: The land ownership pattern within the boundaries of the Coronado National Forest is characterized by large contiguous blocks of National Forest System land. Complex and fragmented land ownership patterns have been consolidated through collaborative land adjustments with non-Federal landowners or agencies (State, county, private, and other ownerships). Lands acquired are valuable for public access, watershed protection, wildlife habitat, recreation, open space, and scenic resources. (page 92)

Rationale for Change(s)

Revised direction to be more explicit.

Lands: Multiple Use

1986 Plan Content: Goals and DCs

FW Goal: Allow the use of available National Forest lands for appropriate public or private interests consistent with National Forest policies. (page 11)

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management: Ensuring administrative and public access to National Forest System lands by acquiring road and trail rights-of-way needed to meet public access objectives using various acquisition methods. (page 95)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Partially addressed by this MA and other direction by resource and EMA.

Lands: Trespass

1986 Plan Content: Goals and DCs

FW Goal: Resolve unauthorized occupancy as cases arise. (page 11)

Revised Forest Plan Direction

FW GDs for Land Ownership Adjustments and Boundary Management:

- Landline location surveys should be prioritized by the following criteria:
  - Where known litigation is pending, a title claim has been asserted, encroachments are suspected, or the probability of encroachment can be reduced.
  - Where significant resource values exist and use or manipulation of resources is planned (this includes the location, by survey, of right-of-way easements necessary for resource management).
  - All remaining property lines.
- A Bureau of Land Management (BLM) resurvey should be requested where there has been an extensive loss or obliteration of original corner monuments and/or where the potential for future litigation regarding the property boundaries between the national forest and private lands are high. (page 94)

Rationale for Change(s)

Revised direction to be more explicit. Direction provided by existing law, regulation, and policy (see appendix F).

Lands: Rights-of-Way

1986 Plan Content: Goals and DCs

FW Goal: Obtain rights-of-way needed for resource management objectives. (page 11)

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management: Ensuring administrative and public access to National Forest System lands by acquiring road and trail rights-of-way needed to meet public access objectives using various acquisition methods. (page 95)

Rationale for Change(s)

Better defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Lands: Research Natural Areas

1986 Plan Content: Goals and DCs

FW Goal: Protect representative areas identified for the Research Natural Area System. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Direction provided by existing policy (see appendix F).

Facilities and Transportation: Health and Safety

1986 Plan Content: Goals and DCs

FW Goal: Maintain all facilities to maintain health and safety standards. Provide administrative improvements to meet resource and activity needs. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Unclear whether the 1986 forest plan direction is a DC, ST, OBJ, or GD. Direction provided by existing law, regulation, and policy (see appendix F). Explicit direction is provided in the revised forest plan by resource and EMA.

Facilities and Transportation: Property Lines

1986 Plan Content: Goals and DCs

FW Goal: Identify property lines. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Direction provided by existing law, regulation, and policy (see appendix F).

Facilities and Transportation: Resource Management

1986 Plan Content: Goals and DCs

FW Goal: Provide transportation systems to meet land management and resource needs. (page 11)

Revised Forest Plan Direction

FW DCs for Motorized Transportation System:

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. It provides access to National Forest System lands for public and administrative use. (page 74)
- The existing road system provides adequate access for resource management activities, sufficient legal public access to the Coronado and its amenities such as campgrounds and trailheads, and access for homeland security purposes near the international border. (page 75)

Rationale for Change(s)

Revised direction to be more explicit. Direction also provided by existing regulation and policy (see appendix F).

Facilities and Transportation: Pollution

1986 Plan Content: Goals and DCs

FW Goal: Insure that improvements will meet pollution abatement standards. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Direction provided by existing law, regulation, and policy (see appendix F).

Safety / Protection: Fire

1986 Plan Content: Goals and DCs

FW Goal: Protect life, property, and resources from wildfire while using prescribed fire as a tool to meet management objectives. (page 11)

Revised Forest Plan Direction

DC for Wildland-Urban Interface: As a result of vegetation management, most wildfires in the wildland-urban interface are low to mixed-severity fires that result in limited loss of structures or ecosystem function. Patterns of treatments are effective in modifying fire behavior. Wildland-urban interface residents and visitors are knowledgeable about wildfire protection measures for their homes and property, including defensible space. (page 23)

OBJ for Wildland-Urban Interface: Treat 5,000 to 10,000 acres in the wildland-urban interface using wildland fire (planned and unplanned ignitions), prescribed cutting, and mastication every year to reduce fire hazard and risk to communities and the forest. (page 23)

Rationale for Change(s)

Addressed primarily as a DC for Wildland—Urban Interface areas. More explicit DC, OBJ, GD, and STs are prescribed by vegetation community, resource, and ecosystem management area. Direction also provided by existing law, regulation, and policy (see appendix F).

Safety / Protection: Pest Management

1986 Plan Content: Goals and DCs

FW Goal: Through integrated pest management, manage resources to prevent buildup of insects and diseases. (page 11)

Revised Forest Plan Direction

FW MA for Invasive Species: Eradicating or managing invasive species with a coordinated approach using integrated pest management. (page 69)

FW MA for Vegetation Communities: Prioritizing existing invasive plant, insect, and pathogen species for eradication, containment, or control. Developing resistance in host species when eradication, containment, or control is not possible. (page 23)

Rationale for Change(s)

Better defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Direction in the Revised Plan recognizes the importance of insect and diseases as natural ecological disturbance agents and their variability across the landscape. Therefore, explicit direction by vegetation community, resource, and ecosystem management area is prescribed to meet desired conditions.

Safety / Protection: Interagency Cooperation

1986 Plan Content: Goals and DCs

FW Goal: Cooperate with state and local law enforcement agencies in the protection of visitors, their property, and National Forest lands and facilities. (page 11)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Direction provided by existing law, regulation, and policy (see appendix F).

Safety / Protection: Air Quality

1986 Plan Content: Goals and DCs

FW Goal: Cooperate with other Federal, state, and local regulatory agencies to protect air quality as required by the Clean Air Act. (page 11)

Revised Forest Plan Direction

FW MA for Air: Participating with the States of Arizona and New Mexico in the air quality regulatory process by reviewing air permit applications for new and modified industrial facilities to ensure that their air emissions do not adversely impact the air quality-related values (such as visibility) of federally protected wilderness areas. (page 65)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Better defined as an MA. MAs describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Mexican Spotted Owl

In 1996, Forest Plan Amendment Number 8 added standards and guidelines for Mexican spotted owl, northern goshawk, old growth management and range forage utilization per the Regional

Forester amendment decision. Revised forest plans have incorporated a regionally consistent guideline to adopt species protection measures from approved recovery plans. The rationale for this change being that the most current information is contained within approved recovery plans, so including them by reference will provide the most updated information for species recovery rather than needing to amend the forest plan when new information is available.

Mexican Spotted Owl: Protected Habitats

1986 Plan Content

FW ST: Provide for three levels of habitat management: protected, restricted, and other forest and woodland types to achieve a diversity of habitat conditions across the landscape. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012).

1986 Plan Content

FW ST: Protected areas include delineated protected activity centers: mixed conifer and pine-oak forests with slopes greater than 40 percent where timber harvest has not occurred in the last 20 years; and reserved lands which include wilderness, research natural areas, wild and scenic rivers, and congressionally-recognized wilderness study areas. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat. “Reserved lands” are no longer classified as protected habitat for this species.

1986 Plan Content

FW ST: Establish a protected activity center at all Mexican spotted owl sites located during surveys and all management territories established since 1989. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat.

1986 Plan Content

FW ST: Restricted areas include all mixed-conifer, pine-oak, and riparian forests outside of protected areas. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012).

1986 Plan Content

FW ST: Other forest and woodland types include all ponderosa pine, spruce-fir, woodland, and aspen forests outside protected and restricted areas. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of habitat types.

Mexican Spotted Owl: Surveys

1986 Plan Content

FW ST: Survey all potential spotted owl areas including protected, restricted, and other forest and woodland types within an analysis area, plus the area 1/2 mile beyond the perimeter of the proposed treatment area. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current Survey Protocol (appendix D).

1986 Plan Content

FW GD: Conduct surveys following Region 3 survey protocol. Breeding season is March 1 to August 31. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current Survey Protocol (appendix D).

Mexican Spotted Owl: Monitoring

1986 Plan Content

FW ST: Monitor changes in owl populations and habitat needed for delisting. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

The most current direction is provided by the Revised Recovery Plan for Mexican Spotted Owl (2012).

Mexican Spotted Owl: Monitoring and Coordination

1986 Plan Content

FW GD: Monitoring and evaluation should be collaboratively planned and coordinated with involvement from each national forest, USFWS Ecological Services Field Office, USFWS Regional Office, Forest Service Regional Office, Rocky Mountain Research Station, recovery team, and recovery unit working groups. Population monitoring should be a collaborative effort with participation of all appropriate resource agencies. Habitat monitoring of gross habitat changes should be a collaborative effort of all appropriate resource agencies. Habitat monitoring of treatment effects (pre- and post-treatment) should be done by the agency conducting the treatment. Prepare an annual monitoring and evaluation report covering all levels of monitoring done in the previous year. The annual report should be forwarded to the Regional Forester with copies provided to the recovery unit working groups, USFWS Ecological Services field offices, and the USFWS Regional Office. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current direction on monitoring and evaluation.

Mexican Spotted Owl: Rangewide Monitoring

1986 Plan Content

FW GD: Track gross changes in acres of owl habitat resulting from natural and human-caused disturbances. Acreage changes in vegetative composition, structure, and density should be tracked, evaluated, and reported. Remote sensing techniques should provide an adequate level of accuracy. In protected and restricted areas where silvicultural or fire abatement treatments are planned, monitor treated stands pre- and post-treatment to determine changes and trajectories in fuel levels; snag basal areas; live tree basal areas; volume of down logs over 12-inches in diameter; and basal area of hardwood trees over 10-inches in diameter at the root crown. (page 19)

Revised Forest Plan Direction

Relevant Monitoring Plan Questions (part of the Forest Plan Monitoring Strategy):

- Forestwide Vegetation (All Types): How has the scale and severity of disturbance (such as wildfires, insects, and disease) and vegetative response to these disturbances demonstrated changes in wildland ecosystems due to climate change across the Coronado? (page 176)
- Wet and Dry Mixed-Conifer: The Mexican spotted owl is identified as a management indicator species in these vegetation communities. At the project level, are stand post-treatment conditions consistent with or moving toward desired conditions for coarse woody debris, large diameter trees, and snags? How have populations and distributions of Mexican spotted owl changed? (page 176)
- Riparian Areas: Are riparian areas on the Coronado National Forest at or moving toward desired conditions? (page 177)

Rationale for Change(s)

Incorporated as a monitoring plan questions for effectiveness monitoring of the revised forest plan. See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current direction on monitoring and evaluation.

Mexican Spotted Owl: Protected Activity Center (PAC) Establishment

1986 Plan Content

FW GD: Delineate an area of not less than 600 acres around the activity center using boundaries of known habitat polygons and/or topographic features. Written justification for boundary delineation should be provided. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat and related direction.

1986 Plan Content

FW GD: The protected activity center boundary should enclose the best possible owl habitat configured in as compact a unit as possible, with the nest or activity center located near the center. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Descriptive information, not a GD or ST. See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat.

1986 Plan Content

FW GD: The activity center is defined as the nest site. In the absence of a known nest, the activity center should be defined as a roost grove commonly used during breeding. In the absence of a known nest or roost, the activity center should be defined as the best nest/roost habitat. Protected Activity Center boundaries should not overlap. Submit protected activity center maps and descriptions to the recovery unit working group for comment as soon as possible after completion of surveys. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

This is a definition of PAC, and is not a GD or ST. See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat.

Mexican Spotted Owl: Timber Harvest

1986 Plan Content

FW ST: Allow no timber harvest except for fire risk abatement in mixed conifer and pine-oak forests on slopes greater than 40 percent where timber harvest has not occurred in the last 20 years. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

SD for Forest Products: On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety. (page 70)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012).

Related to timber harvest, Revised Plan direction reflects availability of wood products from non-timber projects such as fuel treatments and restoration activities. The Revised Plan Timber Suitability Analysis found no lands on the Coronado National Forest to be suitable for timber production (p. 171).

1986 Plan Content

FW ST: Allow no timber harvest except for fuelwood and fire risk abatement in established protected activity centers. For protected activity centers destroyed by fire, windstorm, or other natural disaster, salvage timber harvest or declassification may be allowed after evaluation on a case-by-case basis in consultation with US Fish and Wildlife Service. Limit human activity in protected activity centers during the breeding season. In protected and restricted areas, when activities conducted in conformance with these standards and guidelines may adversely affect other threatened, endangered, or sensitive species or may conflict with other established recovery plans or conservation agreements; consult with US Fish and Wildlife Service to resolve the conflict. (page 15)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

SD for Forest Products: On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety. (page 70)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012).

Related to timber harvest, Revised Plan direction reflects availability of wood products from non-timber projects such as fuel treatments and restoration activities. The Revised Plan Timber Suitability Analysis found no lands on the Coronado National Forest to be suitable for timber production (p. 171).

Related to consultation, direction is provided by existing law, regulation, and policy (see appendix F).

Mexican Spotted Owl: Roads and Trails in PACs

1986 Plan Content

FW GD: Road or trail building in protected activity centers should be avoided, but may be permitted on a case-by-case basis for pressing management reasons. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The most current direction is provided by the Revised Recovery Plan for Mexican Spotted Owl (2012).

Mexican Spotted Owl: Recreation in PACs

1986 Plan Content

FW GD: Generally allow continuation of the level of recreation activities that was occurring prior to listing. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012).

Mexican Spotted Owl: Guiding in PACs

1986 Plan Content

FW GD: Require bird guides to apply for and obtain a special use permit. A condition of the permit shall be that they obtain a sub-permit under the U.S. Fish and Wildlife Service Master Endangered Species Permit. The permit should stipulate the sites, dates, and number of visits, and maximum group size permissible. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The most current direction is provided by the Revised Recovery Plan for Mexican Spotted Owl (2012).

Mexican Spotted Owl: Habitat Structure and Composition (various)

1986 Plan Content

FW GD for Old Growth Areas: Except where otherwise noted, implement forest plan old growth standards and guidelines to maintain and promote development of owl habitat.

FW GD for Fuelwood in PACs: Harvest fuelwood when it can be done in such a way the effects on the owl are minimized. Manage within the following limitations to minimize effects on the owl:

- Retain key forest species such as oak.
- Retain key habitat components such as snags and large downed logs
- Harvest conifers less than 9 inches in diameter only within those protected activity centers treated to abate fire risk as described below.

FW GD for Other Forest and Woodland Types: Apply ecosystem approaches to manage for landscape diversity mimicking natural disturbance patterns, incorporating natural variation in stand conditions and retaining special features such as snags and large trees, utilizing appropriate fires, and retention of existing old growth in accordance with forest plan old growth standards and guidelines.

FW GD Fuel Treatments in PACs: Retain woody debris larger than 12-inches in diameter, snags, clumps of broad-leafed woody vegetation, and hardwood trees larger than 10-inches in diameter at the root collar.

FW GD for Fuel Treatments in PACs: Use combinations of thinning trees less than 9-inches in diameter, mechanical fuel treatment, and prescribed fire to abate fire risk in the remainder of the selected protected activity center outside the 100-acre "no treatment" area.

FW GD for Fuel Treatments in PACs with Steep Slopes: Retain woody debris larger than 12 inches in diameter, snags, clumps of broad-leafed woody vegetation, and hardwood trees larger than 10 inches in diameter at the root collar.

FW GD for Fuel Treatments in PACs with Steep Slopes: Use combinations of thinning trees less than 9 inches in diameter, mechanical fuel removal, and prescribed fire.

FW GDs for Restricted Areas:

- In pine-oak forests, retain existing large oaks and promote growth of additional large oaks.
- Manage to ensure a sustained level of owl nest/roost habitat well-distributed across the landscape. Create replacement owl nest/roost habitat where appropriate while providing a diversity of stand conditions across the landscape to ensure habitat for a diversity of prey species.

(page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Key direction from the revised forest plan is listed below for associated vegetation communities; however, this is not an exhaustive list.

FW DC for Vegetation Communities: Ecological conditions provide habitat characteristics necessary for associated federally listed species and rare and culturally important plant species. Habitat conditions provide for survival and recovery of species listed under the Endangered Species Act, and contribute to their delisting. (page 22)

FW DCs for Dry Mixed-Conifer:

- At the landscape scale, the dry mixed-conifer type is a mosaic of forest conditions composed of structural stages ranging from young to old trees. Forest appearance is variable, but generally uneven-aged and open; occasional patches of even-aged structure are present. (page 42)
- The dry mixed-conifer type is composed predominantly of vigorous trees, but declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Snags are typically 18 inches or greater diameter at breast height and average 3 per acre. Downed logs (those greater than 12 inches in diameter at midpoint and more than 8 feet long) average 3 per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 5 to 15 tons per acre. (pages 42 and 43)
- Old growth occurs throughout the landscape, generally in small areas as individual old-growth components, or as clumps of old growth. Old-growth components include old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location

of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). (page 42)

FW GDs for Dry Mixed-Conifer (pages 43 and 44):

- Vegetation treatments should be designed such that replacement structural stages are proportionally present to promote continuous representation of old growth characteristics across the landscape over time.
- Fuel reduction or firewood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.
- Natural regeneration of disturbed areas should be allowed where feasible unless the following circumstances exist: (1) endangered species habitat needs to be restored, (2) the time period of recovery is deemed excessive due to the large size of deforested area and/or lack or nearby seed sources, or (3) there is concern for loss of site capacity from soils loss or extreme competition with early-seral species.

FW DCs for Wet Mixed-Conifer:

- The wet mixed-conifer forest type is a mosaic of structural and seral stages ranging from young to old trees. The landscape arrangement is an assemblage of variably sized and aged groups and patches of trees and other vegetation associations similar to historic patterns. Tree groups and patches are composed of variable species composition, depending on forest seral stages. An approximate balance of seral stages is present across the landscape; each seral stage is characterized by distinct dominant species composition and biophysical conditions. Canopies are generally more closed than in dry mixed conifer. An understory consisting of native grass, forbs, and/or shrubs is present.
- Old growth generally occurs over large areas as stands or forests where old growth is concentrated. Old growth includes old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality).
- The wet mixed-conifer vegetation community is composed predominantly of vigorous trees, but older declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Number of snags and the amount of downed logs (greater than 12 inches diameter at mid-point, greater than 8 feet long) and coarse woody debris (greater than 3 inches diameter) vary by seral stage. (page 45)

FW GDs for Wet Mixed-Conifer:

- Vegetation treatments should be designed such that replacement structural stages are proportionally present to promote assure continuous representation of old growth characteristics across the landscape over time.
- Fuel reduction or fuelwood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.
- Natural regeneration of disturbed areas should be allowed where feasible unless the following circumstances exist: (1) endangered species habitat needs to be restored, (2) the time period of recovery is deemed excessive due to the large size of deforested area and/or lack or nearby seed sources, or (3) there is concern for loss of site capacity from soils loss or extreme competition with early-seral species. (page 46)

FW DCs for Madrean Pine-Oak Woodland (pages 36 and 37):

- The Madrean pine-oak woodland varies from generally open (with large trees providing 10 percent canopy with a grass understory) to groups of 50 percent canopy. Approximately 30 percent of the area is in the open condition; the remainder is closed.
- Declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Downed logs (greater than 10-inches diameter at midpoint and more than 8 feet long) average 3 logs per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 3 to 10 tons per acre.

FW GD for Madrean Pine-Oak Woodland: Clusters of trees, and shrubs, and snags should be maintained in treatment areas to benefit species that require these structures for breeding, feeding, shelter, and other needs. (page 38)

FW DCs for Madrean Encinal Woodland (pages 33, 34, and 35):

- The Madrean encinal woodland is dominated by an open stand of oaks (5 to 25 percent) with denser stands of oaks on north-facing slopes and in drainages (25 to 50 percent canopy).
- Declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Logs (greater than 6-inch diameter at midpoint and more than 2 feet long) average 3 logs per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 1 to 5 tons per acre.
- Some large-diameter trees, snags, and shrubs are retained following fuel treatments, fuelwood gathering, and prescribed fire.

FW DCs for Ponderosa Pine-Evergreen Shrub:

- At the landscape scale, the ponderosa pine-evergreen shrub is composed of trees from structural stages ranging from young to old. Forest appearance is variable but generally uneven-aged and open; areas of even-aged structure are present.
- All structural stages of oak are present, with old trees occurring as dominant individuals or in small groups. Denser tree conditions exist in some locations, such as north-facing slopes and canyon bottoms.
- Old growth occurs throughout the landscape, generally in small areas as individual old-growth components, or as clumps of old growth. Old-growth components include old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). (page 39)

FW GD for Ponderosa Pine-Evergreen Shrub: Fuel reduction or fuelwood gathering projects should retain some large-diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.(page 40)

Rationale for Change(s)

The 1986 plan language is partially inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012). Direction provided by various FW decisions for associated vegetation communities (examples of key direction provided), consistent with the Revised Recovery Plan.

Mexican Spotted Owl: Fuels Treatments and Monitoring in PACs

1986 Plan Content

FW GD: Select for treatment 10 percent of the protected activity centers where nest sites are known in each recovery unit having high fire risk conditions. Also select another 10 percent of the protected activity centers where nest sites are known as a paired sample to serve as control areas. Select and treat additional protected activity centers in 10 percent increments if monitoring of the initial sample showed there were no negative impacts which can be mitigated by modifying treatment methods. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements.(page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current direction on monitoring.

1986 Plan Content

FW GDs:

- Designate a 100-acre "no treatment" area around the known nest site of each selected protected activity center. Habitat in the no treatment area should be as similar as possible in structure and composition as that found in the activity center.
- Pre- and post-treatment monitoring should be conducted in all protected activity centers treated for fire risk abatement. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat and direction on monitoring.

Mexican Spotted Owl: Fuels Treatments in PACs

1986 Plan Content

FW GD: Use light prescribed burns in non-selected protected activity centers on a case-by-case basis. Burning should avoid a 100-acre "no treatment" area around the activity center. Large woody debris, snags, clumps of broad-leafed vegetation should be retained and hardwood trees larger than 10 inches diameter at the root collar. (page 16)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 plan language is inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012). See the Revised Recovery Plan for the most current direction.

Mexican Spotted Owl: Fuels Treatments in PACs with Steep Slopes

1986 Plan Content

FW GD: No seasonal restrictions apply. Treat fuel accumulations to abate fire risk. Pre- and post-treatment monitoring should occur within all steep slopes treated for fire risk abatement. (page 17)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 plan language is partially inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012), including monitoring requirements. See the Revised Recovery Plan for the most current direction.

Mexican Spotted Owl: Restricted Areas

1986 Plan Content

FW GD: The following table [table 13] displays the minimum percentage of restricted area which should be managed to have nest/roost characteristics. The minimum mixed conifer restricted area includes 10 percent at 170 basal area and additional amount of area at 150 basal area. The additional area of 150 basal area is +10 percent in BR-E and +15 percent in all other recovery units. The variables are for stand averages and are minimum threshold values and must be met simultaneously. In project design, no stands simultaneously meeting or exceeding the minimum threshold values should be reduced below the threshold values unless a district-wide or larger landscape analysis of restricted areas shows that there is a surplus of restricted area acres simultaneously meeting the threshold values. Management should be designed to create minimum threshold conditions on project areas where there is a deficit of stands simultaneously meeting minimum threshold conditions unless the district-wide or larger landscape analysis shows there is a surplus. (page 17)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

1986 Plan Content

FW GD: Attempt to mimic natural disturbance patterns by incorporating natural variation, such as irregular tree spacing and various patch sizes, into management prescriptions. Maintain all species of native trees in the landscape including early seral species. Allow natural canopy gap processes to occur, thus producing horizontal variation in stand structure. Emphasize uneven-aged management systems. However, both even-aged and uneven-aged systems may be used where appropriate to provide variation in existing stand structure and species diversity. Existing stand conditions will determine which system is appropriate. (page 17)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

1986 Plan Content

FW GD: Extend rotation ages for even-aged stands to greater than 200 years. Silvicultural prescriptions should explicitly state when vegetative manipulation will cease until rotation age is reached. (page 17)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

1986 Plan Content

FW GD: In pine-oak forests, retain existing large oaks and promote growth of additional large oaks. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

1986 Plan Content

FW GD: Encourage prescribed and prescribed-natural fire to reduce hazardous fuel accumulation. Thinning-from-below may be desirable or necessary before burning to reduce ladder fuels and the risk of crown fire. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

1986 Plan Content

FW GD: Retain substantive amounts of key habitat components: (page 18)

- Snags 18-inches in diameter and larger
- Down logs over 12-inches midpoint diameter
- Hardwoods for retention, recruitment, and replacement of large hardwoods.
- Save all trees greater than 24 inches DBH.

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Restricted Areas are not identified as a protected habitat in the Revised Recovery Plan for Mexican Spotted Owl (2012). See tables C.1 and C.2 in the Revised Recovery Plan for current direction on habitat types and recommended management.

Mexican Spotted Owl: Riparian

1986 Plan Content

FW GD: Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with forest plan riparian standards and guidelines. Management strategies should move degraded riparian vegetation toward good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW ST for Wetlands: The total acreage of existing wetlands will not be diminished due to management activities. (page 51)

FW GD for Riparian Areas:

- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

FW GDs for Natural Water Sources:

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources. (page 60)

Rationale for Change(s)

More explicit direction provided by Revised Plan decisions for riparian areas, wetlands, and natural water sources. Further direction provided by the Revised Recovery Plan for Mexican Spotted Owl (2012).

Mexican Spotted Owl: Livestock Grazing

1986 Plan Content

FW GD: Implement forest plan forage utilization standards and guidelines to maintain owl prey availability, maintain potential for beneficial fire while inhibiting potential destructive fire, maintain and restore riparian ecosystems, and promote development of owl habitat. Strive to attain good to excellent range conditions. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW DC for Range Management: Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GDs for Range Management (page 91):

- Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife.
- Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species.

Rationale for Change(s)

Direction provided by Revised Plan FW decisions for Range Management, consistent with the Revised Recovery Plan. Livestock grazing projects and activities are implemented through site-specific NEPA for allotments and annual operating instructions. Further direction provided by existing law (ESA), regulation, and policy (see appendix F).

Mexican Spotted Owl: Other Recovery Units (Colorado Plateau, Southern Rocky Mountain, and Upper Gila Mountains)

1986 Plan Content

FW GD: No special additional guidelines apply. (page 18)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. These recovery units do not occur on the Coronado National Forest. (Recovery Units are now termed “Ecological Management Units” in the Revised Recovery Plan for Mexican Spotted Owl (2012)).

Mexican Spotted Owl: Basin and Range Recovery Unit, West

1986 Plan Content

FW GD: Emphasize restoration of lowland riparian habitats. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW ST for Wetlands: The total acreage of existing wetlands will not be diminished due to management activities. (page 51)

FW GD for Riparian Areas: Vegetation treatments should favor the retention of large diameter woody debris in and near stream channels. (page 52)

FW GD for Riparian Areas: Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

FW GDs for Natural Water Sources (page 60):

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources.

Rationale for Change(s)

The most current direction is provided by the Revised Recovery Plan for Mexican Spotted Owl (2012). (Recovery Units are now termed "Ecological Management Units" in the Revised Recovery Plan). Further direction provided by Revised Plan decisions for Vegetation (Riparian Areas and Wetlands) and Natural Water Sources.

1986 Plan Content

FW GD: Management of activities necessary to implement the Mt. Graham red squirrel recovery plan, which may conflict with standards and guidelines for Mexican spotted owl, will take precedence and will be exempt from the conflicting Mexican spotted owl standards and guidelines. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

GD for Mount Graham Red Squirrel Habitat in the Pinaleño EMA: Within habitat for Mount Graham red squirrel: Red squirrel habitat needs should supersede the needs of all other species of plants and animals. (page 156)

Rationale for Change(s)

Revised as GDs, emphasizing precedence of the Mount Graham squirrel over all other species.

Mexican Spotted Owl: Basin and Range Recovery Unit, East

1986 Plan Content

FW GD: Emphasize restoration of lowland riparian habitats. (page 18)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW ST for Wetlands: The total acreage of existing wetlands will not be diminished due to management activities. (page 51)

FW GD for Riparian Areas: Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

FW GDs for Natural Water Sources (page 60):

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources.

Rationale for Change(s)

The most current direction is provided by the Revised Recovery Plan for Mexican Spotted Owl (2012). (Recovery Units are now termed "Ecological Management Units" in the Revised Recovery Plan.) Further direction provided by Revised Plan decisions for Vegetation (Riparian Areas and Wetlands) and Natural Water Sources.

1986 Plan Content

FW GD: Management activities necessary to implement the Sacramento Mountain thistle recovery plan, which may conflict with standards and guidelines for Mexican spotted owl, will take precedence and will be exempt from the conflicting Mexican spotted owl standards and guidelines. (page 18)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. This species and its habitat do not occur on the Coronado National Forest.

Mexican Spotted Owl: PACs in Reserved Lands (Wilderness, Research Natural Areas, Wild and Scenic Rivers, WSAs)

1986 Plan Content

FW GD: Allow prescribed fire where appropriate. (page 17)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

These areas are no longer classified as protected habitat for this species. See the Revised Recovery Plan for Mexican Spotted Owl (2012) for the most current definition of protected habitat.

Mexican Spotted Owl: Monitoring in Upper Gila, Basin and Range East, Basin and Range West Recovery Units

1986 Plan Content

FW GD: Assist the recovery team and recovery unit working groups to establish sampling units consisting of 19 to 39 square mile quadrats randomly allocated to habitat strata. Quadrats should be defined based on ecological boundaries such as ridge lines and watersheds. Quadrat boundaries should not traverse owl territories. Twenty percent of the quadrats will be replaced each year at random. Using the sample quadrats, monitor the number of territorial individuals and pairs per quadrat; reproduction; apparent survival; recruitment; and age structure. Track population density both per quadrat and habitat stratum. (page 19)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

The 1986 plan language is outdated and inconsistent with the Revised Recovery Plan for Mexican Spotted Owl (2012). The Recovery Team determined that this sampling strategy is unfeasible. See the Revised Recovery Plan for the most current direction on monitoring and evaluation.

Northern Goshawk

In 1996, Forest Plan Amendment Number 8 added standards and guidelines for Mexican spotted owl, northern goshawk, old growth management and range forage utilization per the Regional Forester amendment decision. This section addresses northern goshawks.

Northern Goshawk: Habitat Management

1986 Plan Content

Management in northern goshawk habitat (not a ST, GD, or OBJ): The northern goshawk standards and guidelines apply to the forest and woodland communities described below that are outside of Mexican spotted owl protected and restricted areas. Within Mexican spotted owl protected and restricted areas, the Mexican spotted owl standards and guidelines take precedence over the northern goshawk standards and guidelines. One or the other set of standards and guidelines apply to all forest and woodland communities, but the Mexican spotted owl standards always take precedence in areas of overlap. (page 19)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Unclear whether the 1986 forest plan direction is a DC, ST, OBJ, or GD. Addressed broadly as a GD for listed species in the revised forest plan. Other direction is provided by existing law (see appendix F), regulation, and policy. For federally listed species and regionally sensitive species, ESA has the highest authority. Therefore, protection of listed species such as Mexican spotted owl would have precedence over the northern goshawk, a Forest sensitive species. For northern goshawk management and protection, more explicit direction (ST, GD, etc.) is provided in the revised forest plan (see direction below).

1986 Plan Content

FW ST: Survey the management analysis area prior to habitat-modifying activities including a 1/2 mile beyond the boundary. (page 19)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Permitted activities—such as livestock grazing, outfitter guiding, and ecotourism guiding—do not compromise healthy populations of native species, nor do they adversely impact habitat components. (page 67)

FW GD for Animals and Rare Plants (Goshawk): In occupied goshawk nest areas, human presence should be minimized between March 1 and September 30. (page 67)

Rationale for Change(s)

Goshawk survey methods have changed since the 1986 forest plan was approved, and new research describing goshawk ecology and behavior is available. Survey needs will be determined on a project:

and site-specific basis consistent with established protocols from current scientific literature. Currently, this includes the Forest Service publication, Northern Goshawk Inventory and Monitoring Technical Guide (WO-GTR-71).

Northern Goshawk: Post-fledging Area (PFA) Establishment

1986 Plan Content

FW ST: Establish, and delineate on a map, a post-fledging family area that includes six nesting areas per pair of nesting goshawks for known nest sites, old nest sites, areas where historical data indicates goshawks have nested there in the past, and where goshawks have been repeatedly sighted over a two-year or greater time period, but no nest sites have been located. (page 19)

Revised Forest Plan Direction

FW GDs for Animals and Rare Plants (Goshawk):

- A minimum of three goshawk nest areas and three replacement nest areas should be located per goshawk territory. Goshawk nest and replacement nest areas should generally be located in drainages, at the base of slopes, and on northerly (northwest to northeast) aspects. Nest areas should generally be 25 to 30 acres in size.
- Goshawk post-fledging areas of approximately 420 acres in size should be designated surrounding nest sites.(page 67)

Rationale for Change(s)

Carried forward as a GD in the revised forest plan, with more explicit direction for PFA delineation consistent with current scientific literature.

Northern Goshawk: Habitat Structure and Composition (Various)

1986 Plan Content

(pages 19 and 20)

FW ST: Manage for uneven-age stand conditions for live trees and retain live reserve trees, snags, downed logs, and woody debris levels throughout woodland, ponderosa pine, mixed conifer, and spruce-fir forest cover types. Manage for old age trees such that as much old forest structure as possible is sustained over time across the landscape. Sustain a mosaic of vegetation densities (overstory and understory), age classes and species composition across the landscape. Provide foods and cover for goshawk prey.

FW GD (at the management scale): Distribution of habitat structure (tree size and age classes, tree groups of different densities, snags, dead and down woody material, etc.) should be evaluated at the ecosystem management area level, at the mid-scale such as drainage, and at the small-scale of site. Where VSS 6 is deficit within the ecosystem management area, all VSS 6 will be maintained regardless of location. However, over time, the intent is to sustain a relatively even distribution (again based on site quality) of VSS 6 across the ecosystem management area.

FW GD (outside PFAs: general): The distribution of vegetation structural stages for ponderosa pine, mixed conifer, and spruce-fir forests is 10 percent grass/forb/shrub (VSS1), 10 percent

seedling-sapling(VSS2), 20 percent young forest (VSS3), 20 percent mid-aged forest (VSS4), 20 percent mature forest (VSS5), 20 percent old forest (VSS6). Note: The specified percentages as a guide and actual percentages are expected to vary + or : up to 3 percent.

FW GD (outside PFAs: general): The distribution of vegetation structural stages for ponderosa pine, mixed conifer, and spruce-fir forests is 10 percent grass/forb/shrub (VSS1), 10 percent seedling-sapling(VSS2), 20 percent young forest (VSS3), 20 percent mid-aged forest (VSS4), 20 percent mature forest (VSS5), 20 percent old forest (VSS6). Note: The specified percentages as a guide and actual percentages are expected to vary + or :up to 3 percent.

FW GD (outside PFAs: general): The distribution of VSS, tree density, and tree age are a product of site quality in the ecosystem management area. Use site quality to guide in the distribution of VSS, tree density, and tree ages. Use site quality to identify and manage dispersal PFA and nest habitat at 2-2.5 mile spacing across the landscape.

FW GD (outside PFAs-general): Snags are 18 inches or larger DBH and 30-feet or larger in height, downed logs are 12-inches in diameter and at least 8-feet long, woody debris is 3-inches or larger on the forest floor, canopy cover is measured with vertical crown protection on average across the landscape.

FW GD (outside PFAs: canopy cover): Canopy cover guidelines apply only to mid-aged to old forest structural stages (VSS4, VSS5, and VSS6) and not to grass/forb/shrub to young-forest structural stages (VSS1, VSS2, and VSS3).

FW GD (outside PFAs: spruce-fir): Canopy cover for mid-aged forest (VSS4) should average 1/3 (60 percent) and 2/3 (40 percent), mature forest (VSS5) should average 60+ percent. Maximum opening size is 1-acre, with a maximum width of 125 feet. Provide two groups of reserve trees per acre with six trees per group when opening size exceeds 0.5. Leave at least 3 snags, 5 downed logs, and 10-15 tons of woody debris per acre.

FW GD (outside PFAs: mixed-conifer): Canopy cover for mid-aged forest (VSS4) should average 1/3 (60+ percent) and 2/3 (40+ percent), mature forest VSS5) should average 50+ percent, and old forest (VSS 6) should average 60+ percent. Maximum opening size is up to 4-acres, with a maximum width of up to 200 feet. Retain one group of reserve trees per acre of up to 3-5 trees per group for openings greater than 1-acre in size. Leave at least 3 snags, 5 downed logs, and 10-15 tons of woody debris per acre.

FW GD (outside PFAs: ponderosa pine): Canopy cover for mid-aged forest (VSS4) should average 40+ percent, mature forest (VSS5) should average 40+ percent, and old forest (VSS6) should average 40+ percent. Opening size is up to 4-acres, with a maximum width of up to 200 feet. One group of reserve trees, 3-5 trees per group, will be left if the opening is greater than an acre in size. Leave at least 2 snags per acre, 3 downed logs per acre, and 5-7 tons of woody debris per acre.

FW GD (outside PFAs: woodland): Manage for uneven-age conditions to sustain a mosaic of vegetation densities (overstory and understory), age classes, and species composition well-distributed across the landscape. Provide for reserve trees, snags, and down woody debris.

FW GD (within PFAs, general): Provide for a healthy sustainable forest environment for the post-fledging family needs of goshawks. The principle difference between within the post-fledging family area and outside the post-fledging family area is the higher canopy cover within the post-

fledging family area and smaller opening size within the post-fledging family area. Vegetative Structural distribution and structural conditions are the same within and outside the post-fledging family area.

FW GD (within PFAs, spruce-fir): Canopy cover for mid-aged forest (VSS4) should average 60+ percent and for mature (VSS 5) and old forest (VSS6) should average 70+ percent.

FW GD (within PFAs, mixed-conifer): Canopy cover for mid-aged (VSS4) to old forest (VSS6) should average 60+ percent.

FW GD (within PFAs, ponderosa pine): Canopy cover for mid-aged forest (VSS4) should average 1/3 (60+ percent) and 2/3 (50+ percent). Mature (VSS5) and old forest (VSS6) should average 50+ percent.

FW GD (within PFAs, woodland): Maintain existing canopy cover levels.

FW GD (within nesting areas, general): Provide unique nesting habitat conditions for goshawks. Important features include trees of mature to old age with high canopy cover.

FW GD (within nesting areas, general): The structure of the vegetation within nest areas is associated with the forest type, and tree age, size, and density, and the developmental history of the stand. Table 5 of RM-217 presents attributes required for goshawks on locations with "low" and "high" site productivity.

FW GD (within nesting areas: spruce-fir, mixed-conifer, and ponderosa pine): The nesting area contains only mature to old forest (VSS5 and VSS6) having an canopy cover (measured vertically) between 50-70 percent with mid-aged VSS6 trees 200-300 years old. Non-uniform spacing of trees and clumpiness is desirable.

FW GD (within nesting areas: woodland): Maintain existing canopy cover levels.

Revised Forest Plan Direction

Key direction from the revised forest plan is listed below for associated vegetation communities, however this is not an exhaustive list.

FW DCs for Vegetation Communities (page 22):

- In woodland and forested vegetation communities, declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape.
- Forest conditions in goshawk post-fledging areas (PFAs) are similar to general forest conditions, except that these forests contain 10 to 20 percent higher basal area in the mid-age to old tree groups than goshawk foraging areas and the general forest. Goshawk nest areas have forest conditions that are multi-aged, but are dominated by large trees with relatively dense canopies.

FW DCs for Dry Mixed-Conifer:

- Forest conditions in goshawk post-fledging family areas are similar to general forest conditions except these forests contain 10 to 20 percent higher basal area in mid-aged to old tree groups than in goshawk foraging areas and in the general forest. Goshawk nest areas have forest conditions that are multi-aged but are dominated by large trees with relatively denser canopies than other areas in the dry mixed-conifer type. (page 43)

- At the landscape scale, the dry mixed-conifer type is a mosaic of forest conditions composed of structural stages ranging from young to old trees. Forest appearance is variable, but generally uneven-aged and open; occasional patches of even-aged structure are present. (page 42)
- The dry mixed-conifer type is composed predominantly of vigorous trees, but declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Snags are typically 18 inches or greater dbh. and average 3 per acre. Downed logs (those greater than 12 inches in diameter at midpoint and more than 8 feet long) average 3 per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 5 to 15 tons per acre. (page 42)
- Old growth occurs throughout the landscape, generally in small areas as individual old-growth components, or as clumps of old growth. Old-growth components include old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). (page 42)

FW Fine Scale DC for Dry Mixed-Conifer Forest: Trees typically occur in irregularly shaped groups and are variably spaced, with some tight clumps. Crowns of trees within the mid-aged to old groups are interlocking or nearly interlocking. (page 43)

FW GDs for Dry Mixed-Conifer (pages 43 and 44):

- Vegetation treatments should be designed such that replacement structural stages are proportionally present to promote continuous representation of old growth characteristics across the landscape over time.
- Fuel reduction or firewood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.
- Natural regeneration of disturbed areas should be allowed where feasible unless the following circumstances exist: (1) endangered species habitat needs to be restored, (2) the time period of recovery is deemed excessive due to the large size of deforested area and/or lack or nearby seed sources, or (3) there is concern for loss of site capacity from soils loss or extreme competition with early-seral species. (page 43)

FW DCs for Wet Mixed-Conifer:

- Forest conditions in goshawk post-fledging family areas (PFAs) are similar to general forest conditions except these forests contain 10 to 20 percent higher tree density (basal area) than goshawk foraging areas and the general forest. Nest areas have forest conditions that are multi-aged but are dominated by large trees with relatively denser canopies than other areas in the wet mixed-conifer type. (page 46)
- The wet mixed-conifer forest type is a mosaic of structural and seral stages ranging from young to old trees. The landscape arrangement is an assemblage of variably sized and aged groups and patches of trees and other vegetation associations similar to historic patterns. Tree groups and patches are composed of variable species composition, depending on forest seral stages. An approximate balance of seral stages is present across the landscape; each seral stage is characterized by distinct dominant species composition and biophysical conditions. Canopies are generally more closed than in dry mixed conifer. An understory consisting of native grass, forbs, and/or shrubs is present. (page 45)

- Old growth generally occurs over large areas as stands or forests where old growth is concentrated. Old growth includes old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). (page 45)
- The wet mixed-conifer vegetation community is composed predominantly of vigorous trees, but older declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Number of snags and the amount of downed logs (greater than 12 inches diameter at mid-point, greater than 8 feet long) and coarse woody debris (greater than 3 inches diameter) vary by seral stage. (page 45)

FW GDs for Wet Mixed-Conifer (page 46):

- Vegetation treatments should be designed such that replacement structural stages are proportionally present to promote assure continuous representation of old growth characteristics across the landscape over time.
- Fuel reduction or fuelwood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.
- Natural regeneration of disturbed areas should be allowed where feasible unless the following circumstances exist: (1) endangered species habitat needs to be restored, (2) the time period of recovery is deemed excessive due to the large size of deforested area and/or lack or nearby seed sources, or (3) there is concern for loss of site capacity from soils loss or extreme competition with early-seral species.

FW DCs for Madrean Pine-Oak Woodland:

- The Madrean pine-oak woodland varies from generally open (with large trees providing 10 percent canopy with a grass understory) to groups of 50 percent canopy. Approximately 30 percent of the area is in the open condition; the remainder is closed. (page 36)
- Declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Downed logs (greater than 10-inches diameter at midpoint and more than 8 feet long) average 3 logs per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 3 to 10 tons per acre. (page 37)

FW GD for Madrean Pine-Oak Woodland: Clusters of trees, and shrubs, and snags should be maintained in treatment areas to benefit species that require these structures for breeding, feeding, shelter, and other needs. (page 38)

FW DCs for Madrean Encinal Woodland:

- The Madrean encinal woodland is dominated by an open stand of oaks (5 to 25 percent) with denser stands of oaks on north-facing slopes and in drainages (25 to 50 percent canopy). (page 33)
- Declining trees provide snags and coarse woody debris. Snags and coarse woody debris are well distributed throughout the landscape. Logs (greater than 6-inch diameter at midpoint and more than 2 feet long) average 3 logs per acre within the forested area of the landscape. Coarse woody debris, including downed logs, ranges from 1 to 5 tons per acre. (page 34)
- Some large-diameter trees, snags, and shrubs are retained following fuel treatments, fuelwood gathering, and prescribed fire. (page 35)

FW DCs for Ponderosa Pine-Evergreen Shrub:

- Forest conditions in goshawk post-fledging family areas are similar to general forest conditions except these forests contain 10 to 20 percent higher basal area in the mid-age to old tree groups than goshawk foraging areas and the general forest. Goshawk nest areas have forest conditions that are multi-aged but are dominated by large trees with relatively denser canopies than other areas in the ponderosa pine-evergreen shrub type. (page 40)
- At the landscape scale, the ponderosa pine-evergreen shrub is composed of trees from structural stages ranging from young to old. Forest appearance is variable but generally uneven-aged and open; areas of even-aged structure are present. (page 39)
- All structural stages of oak are present, with old trees occurring as dominant individuals or in small groups. Denser tree conditions exist in some locations, such as north-facing slopes and canyon bottoms. (page 39)
- Old growth occurs throughout the landscape, generally in small areas as individual old-growth components, or as clumps of old growth. Old-growth components include old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality). (page 39)

FW GD for Ponderosa Pine-Evergreen Shrub: Fuel reduction or fuelwood gathering projects should retain some large-diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments. (page 40)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by various FW decisions (DC, ST, OBJ, GD) for associated vegetation communities (examples of key direction provided), consistent with current scientific literature, the MRNG, and life history and habitat needs for goshawk. Revised plan direction is provided at the landscape, mid-, and fine-scales for vegetation communities. Direction from the 1986 forest plan uses outdated terminology—the revised forest plan does not reference VSS classes.

Northern Goshawk: Human Activity

1986 Plan Content

FW ST: Limit human activity in nesting areas during the breeding season. (page 21)

FW GD (nest sites and PFAs): Limit human activities in or near nest sites and post-fledging family areas during the breeding season so that goshawk reproductive success is not affected by human activities.

FW GD: The breeding season extends from March 1 through September 30.

Revised Forest Plan Direction

FW GD for Animals and Rare Plants (Goshawk): In occupied goshawk nest areas, human presence should be minimized between March 1 and September 30. (page 67)

Rationale for Change(s)

Redundant direction. Revised as a single FW GD, including a separate FW GD that prescribes PFA delineation, consistent with current scientific literature (see above).

Northern Goshawk: Habitat Management

1986 Plan Content

FW ST: Manage the ground surface layer to maintain satisfactory soil conditions, i.e. to maintain soil compaction; and to maintain hydrologic and nutrient cycles. (page 19)

Revised Forest Plan Direction

FW DC for Soil: Ecological and hydrologic functions are not impaired by reduced soil quality. The soil condition quality is satisfactory across the forest. Vegetation and litter limit the formation of rills, gullies, and pedestals; excessive soil deposition, and topsoil loss. Soils provide for diverse native plant species. Vegetative ground cover is distributed across the soil surface as described for forestwide vegetation community desired conditions and promotes nutrient cycling and water infiltration. (page 63)

Rationale for Change(s)

Addressed broadly as a FW DC for Soil. Further direction provided for associated vegetation communities (dry and wet mixed-conifer, Madrean encinal woodland, Madrean pine-oak woodland, and ponderosa pine).

1986 Plan Content

FW ST: When activities conducted in conformance with these standards and guidelines may adversely affect other threatened, endangered, or sensitive species, or may conflict with other established recovery plans or conservation agreements, consult with US Fish and Wildlife Service to resolve the conflict. (page 19)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MA for Animals and Rare Plants: Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing. (page 68)

Rationale for Change(s)

Direction provided by existing law (ESA), regulation, and policy (see appendix F).

1986 Plan Content

FW ST: Within the ranges of the Kaibab pincushion cactus, *Pediocactus paradinei*, and the Arizona leatherflower, Clematis *hirsutissima arizonica*, management activities needed for the conservation of these two species that may conflict with northern goshawk standards and

guidelines will be exempt from the conflicting northern goshawk standards and guidelines until conservation strategies or recovery plans (if listed) are developed for the two species. (page 19)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. These species and their habitat do not occur on the Coronado National Forest.

Northern Goshawk: Riparian (General)

1986 Plan Content

FW GD: Emphasize maintenance and restoration of healthy riparian ecosystems through conformance with forest plan riparian standards and guidelines. Management strategies should restore degraded riparian areas to good condition as soon as possible. Damage to riparian vegetation, stream banks, and channels should be prevented. (page 19)

Revised Forest Plan Direction

FW ST for Wetlands: The total acreage of existing wetlands will not be diminished due to management activities. (page 51)

FW GDs for Riparian Areas:

- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

FW GDs for Natural Water Sources (page 60):

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources.

Rationale for Change(s)

More explicit direction provided by revised plan decisions for riparian areas, wetlands, and natural water sources.

Northern Goshawk: All Habitat (General)

1986 Plan Content

FW GD: Refer to USDA Forest Service General Technical Report RM-217 entitled, "Management Recommendations for the Northern Goshawk in the Southwestern United States" for scientific information on goshawk ecology and management which provide the basis for the management guidelines. Supplemental information on goshawk ecology and management may

be found in "The Northern Goshawk: Ecology and Management" published by the Cooper Orinthological Society as Studies in Avian Biology No. 16. In woodland forest cover types, use empirical data to determine desired habitat conditions. (page 20)

Revised Forest Plan Direction

None

Rationale for Change(s)

The revised forest plan incorporates and carries forward certain provisions of the MRNG, but not verbatim. For example, explicit direction is provided by the for nest area delineation, PFAs, and human disturbance during the breeding season (see direction above), consistent with current scientific literature and the best available science for goshawk.

Northern Goshawk: Inventory

1986 Plan Content

FW GDs: (page 20)

- Use the R3 survey protocol to get complete coverage of the management analysis area (Kennedy and Stahlecker 1993, as modified by Joy, Reynolds, and Leslie 1994). Management analysis areas should be entire ecosystem management areas if possible.
- Complete at least one year of survey, but two years of survey should be done to verify questionable sightings, unconfirmed nest sites, etc. If nesting goshawks are found during the first year of inventory, a second year of inventory is not needed in that territory.

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level. Goshawk survey methods have changed since the 1986 forest plan was approved, and new research describing goshawk ecology and behavior is available. Survey needs will be determined on a project and site-specific basis consistent with established protocols from current scientific literature. Currently, this includes the Forest Service publication, Northern Goshawk Inventory and Monitoring Technical Guide (WO-GTR-71).

1986 Plan Content

FW GD: For areas where complete inventories cannot be done, use aerial photographs to locate vegetative structural stages (VSS) 4-6 within the project area and inventory just those sites for goshawk nest areas, using R3 inventory protocol. All uninventoried areas (VSS 1-3) will be managed to post-fledging family area (PFA) specifications while in that stage. If, while using this inventory option, evidence suggests goshawks are present (such as finding plucking perches or molted goshawk feathers) conduct a complete inventory as outlined above. (page 20)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level, with outdated terminology—the revised forest plan does not reference VSS classes. Goshawk survey methods have changed since the 1986 forest plan was approved, and new research describing goshawk ecology and behavior is available. Survey needs will be determined on a project and site-specific basis consistent with established protocols from current scientific literature. Currently, this includes the Forest Service publication, Northern Goshawk Inventory and Monitoring Technical Guide (WO-GTR-71).

1986 Plan Content

FW GD: If forests have goshawks commonly nesting in stands classified as VSS 1-3, use the complete inventory methods for those areas. There may be situations where an area is classified as VSS 3, based on the predominant VSS class, but in actuality a combination of VSS 4 and 5 predominate the area. For those situations, use the complete inventory methods. (page 20)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level, with outdated terminology—the revised forest plan does not reference VSS classes. Goshawk survey methods have changed since the 1986 forest plan was approved, and new research describing goshawk ecology and behavior is available. Survey needs will be determined on a project and site-specific basis consistent with established protocols from current scientific literature. Currently, this includes the Forest Service publication, Northern Goshawk Inventory and Monitoring Technical Guide (WO-GTR-71).

Northern Goshawk: Home Range

1986 Plan Content

FW GD: Post-fledging family areas (PFA) will be approximately 600 acres in size. Post-fledging family areas will include the nest sites and consist of the habitat most likely to be used by the fledglings during their early development. (page 20)

Revised Forest Plan Direction

FW GDs for Animals and Rare Plants (Goshawk):

- Goshawk post-fledging areas of approximately 420 acres in size should be designated surrounding nest sites.
- A minimum of three goshawk nest areas and three replacement nest areas should be located per goshawk territory. Goshawk nest and replacement nest areas should generally be located in drainages, at the base of slopes, and on northerly (northwest to northeast) aspects. Nest areas should generally be 25 to 30 acres in size. (page 67)

Rationale for Change(s)

Carried forward as a FW GD with more explicit direction for PFA delineation, consistent with current scientific literature.

1986 Plan Content

FW GD: Establish a minimum of three nest areas and three replacement nest areas per post-fledging family area. The nest areas and replacement nest areas should be approximately 30 acres in size. A minimum total of 180 acres of nest areas should be identified within each post-fledging family area.

FW GD: Manage for nest replacement sites to attain sufficient quality and size to replace the three suitable nest sites. (page 20)

Revised Forest Plan Direction

FW GDs for Animals and Rare Plants (Goshawk): (page 20)

- A minimum of three goshawk nest areas and three replacement nest areas should be located per goshawk territory. Goshawk nest and replacement nest areas should generally be located in drainages, at the base of slopes, and on northerly (northwest to northeast) aspects. Nest areas should generally be 25 to 30 acres in size.
- Goshawk post-fledging areas of approximately 420 acres in size should be designated surrounding nest sites. (page 67)

Rationale for Change(s)

Carried forward as a FW GD with more explicit direction, consistent with current scientific literature.

1986 Plan Content

FW GD: Nest site selection will be based first on using active nest sites followed by the most recently used historical nest areas. When possible, all historical nest areas should be maintained. (page 20)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level. Management will vary by area and project, consistent with established protocols from current scientific literature.

Northern Goshawk: Outside PFA (General)

1986 Plan Content

FW GD: The order of preferred treatment for woody debris is:

1. Prescribed burning,
2. Lopping and scattering,
3. Hand piling or machine grapple piling,
4. Dozer piling

(page 20)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level. Management will vary by area and project, consistent with established protocols from current scientific literature.

Northern Goshawk: Within Nesting Areas (General)

1986 Plan Content

FW GD: Preferred treatments to maintain the desired structure are to thin-from-below with non-uniform spacing and use of hand tools and fire to reduce fuel loads. Lopping and scattering of thinning debris is preferred if prescribed fire cannot be used. Piling of debris should be limited. When necessary, hand piling should be used to minimize compaction within piles and to minimize displacement and destruction of the forest floor and the herbaceous layer. Do not grapple or dozer-pile debris. Manage road densities at the lowest level possible to minimize disturbance in the nest area. Use small, permanent skid trails in lieu of roads for timber harvesting. (page 21)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level. Management will vary by area and project, consistent with established protocols from current scientific literature. Direction (DC, ST, OBJ, GD) provided for associated vegetation communities and habitat structure and composition.

Northern Goshawk: Human Disturbance (Fire)

1986 Plan Content

FW GD: Low intensity ground fires are allowed at any time in all forested cover types, but crown fires are not acceptable in the post-fledging family area or nest areas. Avoid burning the entire home range of a goshawk pair in a single year. For fires planned in the occupied nest area, a fire management plan should be prepared. The fire management plan should minimize the risk of goshawk abandonment while low intensity ground fire burns in the nest area. Prescribed fire within nesting areas should be planned to move with prevailing winds away from the nest tree to minimize smoke and risk of crown fire developing and driving the adults off or consuming the nest tree. (page 22)

Revised Forest Plan Direction

FW Landscape Scale DC for Vegetation Communities: Vegetative conditions are resilient to the frequency, extent, and severity of disturbances under a changing climate, especially fire. Natural and human disturbances (such as planned and unplanned fire, mechanical vegetation treatments)

provide desired overall plant density, structure, species composition, coarse woody debris, and nutrient cycling. Desired disturbance regimes are restored. (page 21)

FW Mid-Scale DC for Vegetation Communities: The composition, density, structure, and mosaic of vegetative conditions minimize the threat of uncharacteristic wildfire hazard to local communities and ecosystems. (page 22)

FW Landscape Scale DCs for Dry Mixed-Conifer Forest(page 43):

- The composition, structure, and function of vegetative conditions are resilient to the frequency, extent, severity of disturbances, and to climate variability. The landscape is a functioning ecosystem that contains all its components, processes, and conditions that result from endemic levels of disturbances (e.g., insects, diseases, fire, and wind), including snags, downed logs, and old trees. Grasses, forbs, shrubs, needle cast (fine fuels), and small trees maintain the natural fire regime.
- Frequent, low-severity fires (fire regime I) are characteristic in this type, including throughout goshawk home ranges. Natural and human-caused disturbances are sufficient to maintain desired overall tree density, structure, species composition, coarse woody debris, and nutrient cycling.

FW Mid-Scale DCs for Dry Mixed-Conifer Forest: Fires burn primarily on the forest floor and do not spread between tree groups as crown fire. (page 43)

FW GD for Dry Mixed-Conifer Forest: Fuel reduction or firewood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments. (page 44)

FW Landscape Scale DC for Wet Mixed-Conifer Forest: The composition, structure, and function of vegetation conditions are resilient to the frequency, extent, and severity of disturbances and climate variability. High-severity fires (fire regimes IV and V) rarely occur. (page 45)

FW Mid-Scale DC for Wet Mixed-Conifer Forest: Mixed-severity (fire regime III) and high-severity (fire regime IV) fires and other disturbances maintain desired overall tree density, structure, species composition, coarse woody debris, and nutrient cycling. High-severity fires generally do not exceed 1,000-acre patches of mortality. Forests in the wildland-urban interface are dominated by early-seral, fire-adapted species growing in an overall more open condition than the remainder of the forest. These conditions result in fires that burn primarily on the forest floor and rarely spread as crown fire. (pages 45 and 46)

FW GD for Wet Mixed-Conifer Forest: Fuel reduction or fuelwood gathering projects should retain some large diameter trees, snags and shrubs, and these should be protected well enough from scorching to survive subsequent burn treatments.(page 46)

Also see direction (DC, ST, GD) for other associated vegetation communities including Madrean encinal woodland, Madrean pine-oak woodland, and ponderosa pine.

Rationale for Change(s)

Direction provided by DCs and decisions for associated vegetation communities. Direction also provided by existing law, regulation, and policy (see appendix F) (also see FSM 5140.3, Interagency Prescribed Fire Planning and Implementation Guide; Guidance for the Implementation of Federal Wildland Fire Management Policy, 2009).

Northern Goshawk: All Forested Cover Types (Roads)

1986 Plan Content

FW GD: Manage road densities at the lowest level possible. Where timber harvesting has been prescribed to achieve desired forest condition, use small skid trails in lieu of roads. (page 22)

Revised Forest Plan Direction

FW DCs for Motorized Transportation System:

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. (page 74)
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 75)

FW OBJ for Motorized Transportation System: Decommission, close, and restore 3 to 10 miles of unneeded nonsystem roads annually throughout the plan period, except for roads identified for potential public access routes. (page 75)

FW ST for Motorized Transportation System: Within inventoried roadless areas, roadless character shall be maintained. (page 75)

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas (page 76)

DC for Wild Backcountry: Motorized access is available via a few primitive or high-clearance roads. Motorized vehicle access is allowed into limited areas. (page 99)

GD for Wild Backcountry: New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection. (page 99)

Rationale for Change(s)

Road/travel management decisions will vary by area, consistent with current scientific literature and guidance for goshawk.

Northern Goshawk: All Forested Cover Types (Logging Debris)

1986 Plan Content

FW GDs: (page 22)

- Piling of debris should be limited. When necessary, hand or grapple piling should be used to minimize soil compaction within piles and to minimize forest floor and herbaceous layer displacement and destruction.
- Limit dozer use for piling or scattering of logging debris so that the forest floor and herbaceous layer are not displaced or destroyed.

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Overly prescriptive at the forest plan level. Management will vary by area and project, consistent with established protocols from current scientific literature. Direction (DC, ST, OBJ, GD) provided for associated vegetation communities and habitat structure and composition.

Grazing Management

In 1996, Forest Plan Amendment Number 8 added standards and guidelines for Mexican spotted owl, northern goshawk, old growth management and range forage utilization per the Regional Forester amendment decision. This section addresses grazing management.

Livestock Grazing: Threatened and Endangered Species

1986 Plan Content

FW ST: Forage use by grazing ungulates will be maintained at or above a condition which assures recovery and continued existence of threatened and endangered species. (page 22)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife. (page 91)

FW GD for Range Management: Forage utilization should be based on site-specific resource conditions and management objectives, but in general should be managed at a level corresponding to light to moderate intensity (15 to 45 percent of current year’s growth). Exceptions may be allowed in order to meet objectives related to scientific studies, fuels reduction, invasive plant control, or other targeted grazing or site-specific objectives. (page 91)

Rationale for Change(s)

Addressed by broader DCs and GDs. Livestock grazing projects and activities are implemented through site-specific NEPA for allotments and annual operating instructions. Further direction provided by existing law (ESA), regulation, and policy (see appendix F).

Livestock Grazing: Key Forage Areas and Use

1986 Plan Content

FW GD: Identify key ungulate forage monitoring areas. These key areas will normally be 1/4 to 1 mile from water, located on productive soils on level to intermediate slopes, and be readily accessible for grazing. Size of the key forage monitoring areas could be 200 to 500 acres. In some situations, such as high mountain meadows with perennial streams, key areas may be closer than 1/4 mile from water an less than 20 acres. Within key forage monitoring areas, select appropriate key species to monitor average allowable use. (page 22)

Revised Forest Plan Direction

FW GD for Range Management: Forage utilization should be based on site-specific resource conditions and management objectives, but in general should be managed at a level corresponding to light to moderate intensity (15 to 45 percent of current year's growth). Exceptions may be allowed in order to meet objectives related to scientific studies, fuels reduction, invasive plant control, or other targeted grazing or site-specific objectives. (page 91)

FW GD for Range Management: Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife. (page 91)

FW MAs for Range Management (page 92):

- Reviewing current management of each active allotment at least once every 3 to 5 years to identify consistency with current grazing authorization decisions (completed according to National Environmental Policy Act requirements).
- Annually meeting with permittee to discuss timing, intensity, duration, and frequency of livestock use, as well as infrastructure needs.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Livestock grazing projects and activities are implemented through site-specific NEPA for allotments and annual operating instructions.

1986 Plan Content

(page 22)

FW GD: In consultation with US Fish and Wildlife Service, develop site-specific forage use levels. In the event that site-specific information is not available, average key species forage utilization in key forage monitoring areas by domestic livestock and wildlife should not exceed the levels in the following table [see p. 22 of 1986 forest plan] during the forage growing season.

- The above table is based on composition and climatic conditions typical of sites below the Mogollon Rim. On sites with higher precipitation and vegetation similar to sites above the Mogollon Rim, allowable use for ranges in poor to excellent condition under deferment or rest strategies may be increased by 5 percent. The guidelines established in the above table are applicable only during the growing season for the identified key species within key areas. Allowable use for key forage species during the dormant season is not covered in the above table. These guidelines are to be applied in the absence of more specific guidelines currently established through site-specific NEPA analysis for individual allotments.

- Guidelines for allowable use for specific allotment(s) management or for grazing strategies not covered in the above table will vary on a site-specific basis when determined through the Integrated Resource Management (IRM) process.
- Allowable use guidelines may be adjusted through the land management planning revision or amendment process. Guidelines established through this process to meet specific ecosystem objectives will also employ the key species and key area concept and will be monitored in this manner.

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife. (page 91)

FW GD for Range Management: Forage utilization should be based on site-specific resource conditions and management objectives, but in general should be managed at a level corresponding to light to moderate intensity (15 to 45 percent of current year's growth). Exceptions may be allowed in order to meet objectives related to scientific studies, fuels reduction, invasive plant control, or other targeted grazing or site-specific objectives. (page 91)

FW MAs for Range Management (page 92):

- Reviewing current management of each active allotment at least once every 3 to 5 years to identify consistency with current grazing authorization decisions (completed according to National Environmental Policy Act requirements).
- Annually meeting with permittee to discuss timing, intensity, duration, and frequency of livestock use, as well as infrastructure needs.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Livestock grazing projects and activities are implemented through site-specific NEPA for allotments and annual operating instructions. Further direction provided by existing law (ESA), regulation, and policy (see appendix F).

Old Growth

In 1996, Forest Plan Amendment Number 8 added standards and guidelines for Mexican spotted owl, northern goshawk, old growth management and range forage utilization per the regional forester amendment decision. This section addresses old growth.

Old Growth: Allocations and Analyses

1986 Plan Content

FW ST: Until the forest plan is revised, allocate no less than 20 percent of each forested ecosystem management area to old growth as depicted in the table below [see p. 24 of the 1986 forest plan]. In the long-term, manage old growth in patterns that provide for a flow of functions and interactions at multiple scales across the landscape through time.

FW GD: Strive to create or sustain as much old growth compositional, structural, and functional flow as possible over time at multiple-area scales. Seek to develop or retain old growth function on at least 20 percent of the naturally-forested area by forest type in any landscape. Allocations will consist of landscape percentages meeting old growth conditions and not specific acres.

FW GD: All analyses should be at multiple scales - one scale above and one scale below the ecosystem management areas. The amount of old growth [that] can be provided and maintained will be evaluated at the ecosystem management area level and be based on forest type, site capability, and disturbance regimes. Use information about pre-European settlement conditions at the appropriate scales when considering the importance of various factors.

FW GD: In allocating old growth and making decisions about old growth management, use appropriate information about the relative risks to sustaining old growth function at the appropriate scales due to natural and human-caused events.

FW GD: Forested sites should meet or exceed the structural attributes to be considered old growth in the five primary forest cover types in the southwest as depicted in the table [see p. 24 of the 1986 forest plan].

(page 23)

Revised Forest Plan Direction

DC for Ponderosa Pine-Evergreen Shrub (page 39), Dry Mixed-Conifer Forest (page 42): Old growth occurs throughout the landscape, generally in small areas as individual old-growth components, or as clumps of old growth. Old-growth components include old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality).

DC for Wet Mixed-Conifer Forest (page 45) and Spruce-Fir (page 48): Old growth generally occurs over large areas as stands or forests where old growth is concentrated. Old growth includes old trees, dead trees (snags), downed wood (coarse woody debris), and structural diversity. The location of old growth shifts on the landscape over time as a result of succession and disturbance (tree growth and mortality).

FW GD for Ponderosa Pine-Evergreen Shrub (page 40), Dry Mixed-Conifer (page 43), Wet Mixed-Conifer (page 46), and Spruce-Fir (page 49) Vegetation Communities: Vegetation treatments reflect the characteristic structure stage proportions in order to provide continuous representation of old growth and all structure stages on the landscape.

Glossary: Old growth is defined in detail in the revised forest plan. (page 184)

Also see direction related to old growth and Mexican spotted owl and northern goshawk. (pages 28 and 29, 44 through 46)

Rationale for Change(s)

Overly prescriptive at the forest plan level, superseded by broader direction in the revised forest plan. Further direction provided by decisions for wildlife that depend on old growth.

Old Growth: Spatial Arrangement

1986 Plan Content

FW GD: Consider the effects of spatial arrangement on old growth function, from groups to landscapes, including de facto allocations to old growth such as goshawk nest sites, Mexican spotted owl protected activity centers, sites protected for species behavior associated with old growth, wilderness, research natural areas, and other forest structures managed for old growth function. (page 23)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level, superseded by broader direction in the revised forest plan. Further direction provided by decisions for Mexican spotted owl and northern goshawk.

Old Growth: Modeling

1986 Plan Content

FW GD: Use quantitative models at the appropriate scales when considering the importance of various factors. These models may include, but are not limited to, Forest Vegetation Simulator, BEHAVE, and FARSITE. (page 23)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level, superseded by broader direction in the revised forest plan.

Standards and Guidelines for All Areas

Forestwide standards and guidelines from the 1986 plan are listed below and compared to revised forest plan direction.

Dispersed and Developed Recreation and Wilderness: General

1986 Plan Content

1. Develop operational plans for all areas that are receiving resource damage because of recreation activities.

2. Determine use capacities and manage to those capacities at less than standard or standard. (page 27)

Revised Forest Plan Direction

FW DCs for Recreation:

- Recreation activities are balanced with the ability of the land to support them and create minimal user conflicts. (page 77)
- Developed sites blend with the natural setting, and uses in these places do not cause damage to ecologically sensitive areas. (page 77)
- Forestwide dispersed recreation sites are small and clean, and resource damage is minimal. Managed activities such as paintballing, geocaching, and rock climbing do not permanently detract from the natural character of the forest or adversely impact resources. (page 78)
- Damage to resources from trailheads and trails is minimal. Historic trails are preserved and reestablished where appropriate and feasible. Unauthorized user-created ("wildcat") trails are rare. (page 78)

FW GDs for Recreation (page 79):

- Recreation sites should be managed for capacities that do not cause unacceptable resource damage or impact the landscape character.
- Rock climbing should be managed to balance demand for the activity and the need to protect plants, animals, and other natural resources.

FW MAs for Recreation:

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans). (page 79)
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others. (page 79)
- Increasing recreation opportunities within the capacity of the land and fiscal resources to accommodate forest visitors by expanding existing developed recreation sites and encouraging use at underutilized recreation sites. (page 80)

Rationale for Change(s)

Revised as FW direction. Further direction provided for specific Management Areas and Geographic Areas.

Dispersed and Developed Recreation and Wilderness: Recreation Opportunity Spectrum

1986 Plan Content

3. Integrate recreation planning with other planning through development and use of the Recreation Opportunity Spectrum and education of forest personnel in its application. (page 27)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

Rationale for Change(s)

Revised as a FW GD. Further direction provided for specific Management Areas and Geographic Areas.

Dispersed and Developed Recreation and Wilderness: Trails

1986 Plan Content

4. Nominate appropriate trails to the National Recreation Trails System. (page 27)

Revised Forest Plan Direction

FW MA for Recreation: Following the Coronado National Forest Guidelines for Visitor Information Signs and developing sign plans as needed for scenic byways and other popular areas to provide improved visitor information and a consistent Forest Service image. Applying for and supporting special area designations (such as National Recreation Area and National Recreation Trail) when appropriate to help manage recreation or enhance recreation opportunities. (page 80)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Dispersed and Developed Recreation and Wilderness: Caves

1986 Plan Content

5. Caves will be evaluated under provisions of the Federal Cave Protection Act of 1988. Caves determined to be significant under the Act or those being evaluated are exempt from locational disclosure under the Freedom of Information Act.

6. The location and resources of caves will be kept confidential when needed to protect important archeological resources, habitat for endangered wildlife, sensitive cave biotas, and unique geological features. This confidentiality also includes information provided by cooperators under signed agreements. (page 27)

Revised Forest Plan Direction

None

Rationale for Change(s)

Not carried forward. Direction provided by existing law (Federal Cave Resources Protection Act of 1988), regulation, and policy (see appendix F).

1986 Plan Content

7. Specific management prescriptions will be prepared for caves with high resource, educational, or recreational values; hazardous conditions; or heavy use. These prescriptions will include guidelines for appropriate use, necessary restrictions, and monitoring requirements. Planning priority is for those caves currently under permit. (page 27)

Revised Forest Plan Direction

FW MAs for Biophysical Features (page 55):

- Preparing management prescriptions for caves with important resource, educational or recreational values; hazardous conditions; or heavy use; including information on appropriate use, necessary restrictions, and monitoring requirements. Planning priority is for those caves currently under permit.
- Monitoring significant caves or other biophysical features to determine visitor impacts and the conditions of key resources in order to protect the ecology of the feature or resource.

FW DCs for Biophysical Features (page 54):

- Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. Some caves provide a range of recreational and educational opportunities without diminishing the cave resource.
- Archaeological, geological, paleontological, and biological features of caves are not disturbed by visitors.

FW ST for Biophysical Features: For caves that have been designated or nominated as "significant," manage to perpetuate those features, characteristics, values, or opportunities for which they were designated. (page 55)

FW GDs for Biophysical Features (page 55):

- Environments in caves and abandoned mines should not be altered except where necessary to protect associated natural resources or to protect health and safety. Where mine closure is necessary to protect human health and safety, closures should preserve habitats for roosting bats and avoid direct impacts to bats.
- Identified bat roosts should be managed to provide for the enhancement and protection of bat populations. Protection measures may include seasonal closures, public education, and wildlife-friendly gates.

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by FW DCs, STs, and GDs.

1986 Plan Content

8. Inventory, map, and monitor caves Forestwide to determine visitor capacity, condition, and further management needs. Evaluation of this information will help identify priority caves that may require protection measures such as gating, entry permits, or education emphasis. (page 27)

Revised Forest Plan Direction

FW MAs for Biophysical Features (page 55):

- Monitoring significant caves or other biophysical features to determine visitor impacts and the conditions of key resources in order to protect the ecology of the feature or resource.
- Engaging caving organizations in cave management activities, such as seasonal surveys, closures, and wildlife-friendly gate development at specific sites.
- Periodically updating the list of significant caves on the Coronado.

Rationale for Change(s)

Revised as MAs. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

1986 Plan Content

9. Surface-disturbing land management decisions will include consideration of potential impacts to delicate cave ecosystems.

10. Measures for protection of caves will be incorporated into project planning. These may include avoidance of the alteration of cave entrances, limitation of management activities within and area draining into a cave if they may affect the cave ecosystem, avoidance of diversion of surface drainage into caves, and limitation of public access if required to prevent damage to cave resources or if there are safety hazards. (page 27)

Revised Forest Plan Direction

FW GD for Biophysical Features: Surface management activities, including drilling, in the vicinity of cave and karst features should avoid actions that would significantly impact underground ecosystems by modifying drainage patterns, subsurface water and airflow, or other natural processes. (page 55)

Rationale for Change(s)

Revised as a GD. Protection measures will be determined on a project- and site-specific basis.

1986 Plan Content

11. Identified bat roosts will be managed as a sensitive resource and for the enhancement of populations. Protection measures may include seasonal closures, education, and gating. Management of roosts will include consultation with State and Federal wildlife agencies. (page 27)

Revised Forest Plan Direction

FW ST for Biophysical Features: When closing mine features and caves to public entry, pre-closure inspections shall be conducted to determine if cave dependent or other species are present. Closures will be designed and implemented to address the needs of resident or

historically occurring wildlife within the constraints of meeting public safety needs. (pages 54 and 55)

FW GDs for Biophysical Features (page 55):

- Identified bat roosts should be managed to provide for the enhancement and protection of bat populations. Protection measures may include seasonal closures, public education, and wildlife-friendly gates.
- Environments in caves and abandoned mines should not be altered except where necessary to protect associated natural resources or to protect health and safety. Where mine closure is necessary to protect human health and safety, closures should preserve habitats for roosting bats and avoid direct impacts to bats.

FW MA for Biophysical Features: Managing bat roosts in consultation with State and Federal wildlife agencies. (page 55)

Rationale for Change(s)

Revised direction as ST, GDs, and MA.

1986 Plan Content

12. Access for exploration and development of locatable mineral resources will be analyzed in response to a proposed operating plan. Potential impacts to cave resources will be considered in reviewing proposed mining operating plans. (page 27)

Revised Forest Plan Direction

FW GD for Biophysical Features: Surface management activities, including drilling, in the vicinity of cave and karst features should avoid actions that would significantly impact underground ecosystems by modifying drainage patterns, subsurface water and airflow, or other natural processes. (page 55)

FW DCs for Minerals (page 71 and 72):

- Important wildlife habitats and areas where appropriated funds have been expended are protected through legally appropriate methods from locatable mineral activities. Adverse surface resource impacts are minimized through the appropriate administration of mineral laws and regulations.
- All mineral exploration and mining activities are operating in environmentally sound ways through protection and mitigation measures, including adequate post-mining reclamation assurances, to minimize environmental impacts to other national forest resources. (page 70)

FW MA for Minerals: Using operating plans and bonds for reclamations to protect and restore surface resources. (page 72)

Rationale for Change(s)

Revised direction as a GD. Further direction provided by FW decisions for Minerals.

1986 Plan Content

13. Withdraw from mineral entry those areas needed to protect caves from mining activities. (page 27-1)

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 95)

FW DC for Biophysical Features: Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. (page 54)

FW ST for Biophysical Features: When closing mine features and caves to public entry, pre-closure inspections shall be conducted to determine if cave dependent or other species are present. Closures will be designed and implemented to address the needs of resident or historically occurring wildlife within the constraints of meeting public safety needs. (pages 54 and 55)

Rationale for Change(s)

Revised direction as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by decisions for Biophysical Features. Direction also provided by existing law (Federal Cave Resources Protection Act of 1988), regulation, and policy (see appendix F).

1986 Plan Content

14. Excavation to locate caves will be analyzed and permitted on a case-by-case basis. Exploration inside caves, including excavation, will be commensurate with identified resource values and permitted on a case-by-case basis. (page 27-1)

Revised Forest Plan Direction

FW GD for Biophysical Features: Surface management activities, including drilling, in the vicinity of cave and karst features should avoid actions that would significantly impact underground ecosystems by modifying drainage patterns, subsurface water and airflow, or other natural processes. (page 55)

FW DCs for Biophysical Features (page 54):

- Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. Some caves provide a range of recreational and educational opportunities without diminishing the cave resource.
- Archaeological, geological, paleontological, and biological features of caves are not disturbed by visitors.

FW GD for Biophysical Features: Environments in caves and abandoned mines should not be altered except where necessary to protect associated natural resources or to protect health and safety. Where mine closure is necessary to protect human health and safety, closures should preserve habitats for roosting bats and avoid direct impacts to bats. (page 55)

Rationale for Change(s)

Addressed by FW decisions. Project-level decisions and protection measures will be determined on a site-specific basis.

1986 Plan Content

15. Research activity [in caves] will be permitted when compatible with identified resource values and when regionally significant. (page 27-1)

Revised Forest Plan Direction

FW DCs for Biophysical Features (page 54):

- Significant cave resources' aesthetic, cultural, and scientific values remain intact, and are protected from damage to provide for use by people and wildlife. Some caves provide a range of recreational and educational opportunities without diminishing the cave resource.
- Archaeological, geological, paleontological, and biological features of caves are not disturbed by visitors.

FW MAs for Biophysical Features (pages 55 and 56):

- Managing bat roosts in consultation with State and Federal wildlife agencies.
- Fostering the collaboration and exchange of information between governmental agencies, partners, and other stakeholders to address conservation, interpretation and education management for cave resources, grottos, and associated species.

Rationale for Change(s)

Addressed by FW decisions. Project-level decisions (e.g., permits) and protection measures will be determined on a site-specific basis.

1986 Plan Content

16. All management direction will be accomplished with involvement of interested publics. Encourage management of specific caves through the use of a memorandum of understanding with caving organizations. (page 27-1)

Revised Forest Plan Direction

FW MAs for Biophysical Features: Engaging caving organizations in cave management activities, such as seasonal surveys, closures, and wildlife-friendly gate development at specific sites. (page 55)

Rationale for Change(s)

Overly prescriptive at the forest plan level, addressed as an MA. Public involvement in the management of National Forest System lands is required under existing law (NEPA), regulation, and policy.

1986 Plan Content

17. Entry permits will be required for caves, based upon specific resource considerations. (page 27-1)

Revised Forest Plan Direction

FW MA for Biophysical Features:

Preparing management prescriptions for caves with important resource, educational or recreational values; hazardous conditions; or heavy use; including information on appropriate use, necessary restrictions, and monitoring requirements. Planning priority is for those caves currently under permit. (page 55)

Rationale for Change(s)

Project-level decisions (e.g., permits) and protection measures will be determined on a site-specific basis.

Dispersed and Developed Recreation and Wilderness: Transportation

1986 Plan Content

18. Transportation and recreation planning will consider existing and future needs for both motorized (vehicular) and non-motorized recreation opportunities. Appropriate users will be contacted prior to closing roads or trails to existing uses. (page 27-1)

The following criteria will be applied to each area of the Forest when considering changes in motorized vehicle use:

(a) The type of recreational uses to be accommodated and the appropriate maintenance levels for each road or trail.

(b) Safety of both non-vehicle users and vehicle users.

(c) Minimization of conflicts between vehicle users and non-vehicle users.

(d) Protection of the natural resource base.

Revised Forest Plan Direction

FW DC for Motorized Transportation System (pages 74 and 75):

- The Coronado National Forest has a designated system of routes open for motor vehicle use by the public. The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- All roads including access roads to wilderness trailheads or wild back-country trails and routes are maintained for safe travel by trail users.
- Class of vehicle is appropriate for a given road level, and user conflicts are minimal.
- Road edges are intact and safe even in excessive traffic areas. There are adequate turnouts or passing areas and adequate sight distances available.
- There is an ongoing road maintenance program to prevent damage to resources from roads and to support safe travel by the public in a variety of vehicle types.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 73)

FW OBJs for Motorized Transportation System (page 75):

- Decommission, close, and restore 3 to 10 miles of unneeded nonsystem roads annually throughout the plan period, except for roads identified for potential public access routes.
- Install at least one hardened road surface each year at drainage crossings where erosion, sedimentation, or risks to water quality from road-stream crossings are affecting wildlife habitat in order to prevent downstream effects.
- Realign or remove 2 miles of roads in wetlands or meadows within 10 years of plan implementation.

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

FW MAs for Motorized Transportation System (page 76):

- Establishing partnerships with local off-highway vehicle user groups and the Arizona State Parks Off-highway Vehicle Ambassador Program to encourage safe, responsible off-highway vehicle use and to improve public outreach and education.
- Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas.

FW DCs for Recreation: Damage to resources from trailheads and trails is minimal. (page 78)

FW OBJ for Recreation: Provide opportunities for volunteers to participate in recreation planning, project implementation, or operations and maintenance at 15 to 30 recreation sites or facilities annually. (page 78)

Rationale for Change(s)

Project-level decisions (road and trail closures) and protection measures will be determined on a site-specific basis. Public involvement in the management of National Forest System lands is required under existing law (NEPA), regulation, and policy.

1986 Plan Content

19. The standards and guidelines pertaining to travel and use of motor vehicles within the Forest are by area designation as follows. Designations are shown on the ORV map. The signing of areas open or closed to motor vehicle use will be in accordance with standards and guidelines contained in the Regional Guide for the Southwestern Region. (page 27-1)

(a) **Designation**: Closed to all motorized travel.

Guidelines: Closed to all motorized vehicles at all times, except those authorized by law, permits, and orders in connection with resource management and public safety.

(b) **Designation**: Restricted. Generally closed to all cross-country motorized travel. Roads and trails are open to travel except when posted closed.

Guidelines: Closed to cross-country travel by all motorized vehicles, except those uses authorized by law, permits, and orders in connection with resource management and public safety.

All road and trails are open to motorized travel unless posted as closed. Roads and trails are those listed in the Transportation System Inventory or physically evident on the ground and recognizable as roads or trails. They will be identified with standard route markers to accommodate all users. Vehicles may pull off roads and trails up to 300 feet for parking or camping.

(c) **Designation**: Restricted. Generally closed to all cross-country motorized travel. Roads are open to travel except when posted closed. All trails are closed to motorized travel.

Guidelines: Closed to cross-country travel by all motorized vehicles, except those authorized by laws, permits, and orders in connection with resource management and public safety.

All roads are open to motorized travel unless posted as closed. All trails are closed to motorized travel. A trail is defined as "a way for purposes of travel by foot, stock, or trail vehicles 40-inches wide or less." Roads and trails are those listed in the Transportation System Inventory or physically evident on the ground and recognizable as roads. They will be identified with standard route markers to accommodate all users. Vehicles may pull off roads up to 300 feet for parking or camping.

In Sabino Canyon Recreation Area, private motor vehicles are allowed only in the parking lot. Only administrative, educational, emergency, and shuttle bus vehicular traffic are allowed on canyon roads. Limits on bicycle use may be required.

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

Visual Resource Management

1986 Plan Content

1. Continue to maintain and protect the visual integrity of the landscape by meeting or exceeding the established visual quality objectives, which range from preservation to maximum modification. This shall be done by providing visual analysis for all management practices to

predict visual impacts, recommending methods for meeting visual quality objectives, and mitigating visual impacts in accordance with design guidelines in USDA Handbook 478, National Forest Landscape Management, Volume 2 series. Facilities developed to accommodate the viewer will remain visually subordinate to the surrounding landscape. (page 28)

Revised Forest Plan Direction

FW GDs for Scenery (page 82):

- Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning.
- Facilities should be designed to complement the landscape by siting them to reduce scenic impacts, using dark, neutral colors, and repeating the line, form, texture, pattern, and scale of the landscape to blend structures into their surroundings. This applies to public recreation sites, administrative sites, facilities owned by other government agencies (except for Department of Homeland Security), and permitted structures. Facilities associated with locatable mining activities should blend with the natural background.
- Department of Homeland Security should attempt to use mitigation measures at their facilities to minimize impacts to scenic quality.

FW DCs for Scenery (pages 81 and 82):

- Scenic resources on the Coronado National Forest are in excellent condition and are sustainable and resilient to short-term disturbances and climate change.
- Structures and facilities required for serving public use of scenic and recreation resources include roads, campgrounds, trails, visitor centers, and observation points. To be functional, these facilities are normally visible in immediate foregrounds, but they harmonize with the natural setting.
- In the rare instances where visitors see larger utilitarian structures (such as communications towers, transmission lines, astrophysical facilities, and administrative sites), these elements blend into the landscape well because their design and siting follows the line, form, color, texture, and pattern common in the desired landscape character.
- Scenic quality is affected for short periods of time by vegetation management projects that benefit long term ecosystem health.
- Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). Treatment boundaries are naturally shaped and blend with existing vegetation patterns and landscape character and encourage vegetation that screens unsightly elements (such as administrative buildings, communication sites, and mines) from sensitive viewing areas such as campgrounds and trails.

Rationale for Change(s)

Revised as FW GDs, DCs, and STs for Scenery. Further direction provided for specific management activities (vegetation treatments, mining, utility development, etc.) Direction from the 1986 forest plan is outdated. As described in the revised forest plan, scenic integrity

objectives (SIO) indicate the degree of allowed deviation from existing landscape character. Five levels of desired scenic integrity are used to manage the Coronado National Forest: very high, high, moderate, low, and very low. These objectives determine how much alteration from the landscape character is permissible, according to USDA Handbook 701 "Landscape Aesthetics: A Handbook for Scenery Management."

1986 Plan Content

2. Rehabilitate or enhance the existing visual quality in the process of accomplishing other resource management practices. (page 28)

Revised Forest Plan Direction

FW MA for Scenery: Restoring scenic quality in areas where it has been negatively impacted as other project work is accomplished and/or funds are available. (page 84)

FW GDs for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

Rationale for Change(s)

Revised as an MA. Further direction provided for specific management activities (vegetation treatments, mining, utility development, etc.). Project-level decisions will be determined on a site-specific basis.

1986 Plan Content

3. Evidence of management activities no longer desired will be removed and rehabilitated consistent with designated visual quality objectives. (page 28)

Revised Forest Plan Direction

FW MAs for Scenery (page 83):

- Improving areas with poor existing scenic conditions (i.e., areas with existing scenic integrity of low, very low, or unacceptably low) by removing unwanted facilities and revegetating bare ground.
- Removing facilities (buildings, utility poles/lines, and other structures) that are no longer useful, unless they are historic or desired features.

Rationale for Change(s)

Best defined as MAs. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Project-level decisions will be determined on a site-specific basis.

1986 Plan Content

4. Viewshed corridor plans will be prepared for management activities that fall within viewing areas of major recreational roads and their associated recreation areas. These plans will identify key visual elements of the viewshed and coordinate the activities to promote diversity and the desired visual character over time. (page 28)

Revised Forest Plan Direction

FW GDs for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

Rationale for Change(s)

Addressed as a FW GD. Project-level decisions will be determined on a site-specific basis.

1986 Plan Content

5. Inventory the Existing Visual Condition (EVC) and the Visual Absorption Capability (VAC) of the landscape. (page 28)

Revised Forest Plan Direction

FW GDs for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

FW MA for Scenery: Updating the corporate scenic integrity objective map if there are permanent changes to scenic integrity objectives. (page 84)

Rationale for Change(s)

Outdated guidance, addressed as FW GD and MA for Scenery.

Cultural Resource Management

1986 Plan Content

1. The Forest will comply with the National Historic Preservation Act (NHPA), as amended, and will undertake active management which recognizes cultural resources as equal in importance to other multiple uses. Cultural resources will be managed in coordination with the State Historic Preservation Plan an planning activities of the State Historic Preservation Officer and State Archeologist, and in accordance with the Forest Service Manual and the Coronado National Forest Planning Assessment.

2. Forest authorized projects will be managed to comply with 36 CFR 800, the Forest Service Manual, and the Coronado National Forest Planning Assessment. All consultation responsibilities with the State Historic Preservation Officer will be followed. The area of the undertaking's potential environmental impact will be inventoried for cultural resources. Inventory standards will be as specified in the Forest Service Manual. The identification of areas of Native American religious use will be sought during the project scoping portion of the environmental analysis process. Native American groups descended from groups that occupied the project vicinity aboriginally will be consulted as appropriate. (page 29)

Revised Forest Plan Direction

FW DCs for Cultural Resources (page 87):

- Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance.
- As appropriate, historically significant cultural properties are listed on the National Register of Historic Places. The Coronado's priority cultural resource assets are protected and preserved. Archaeological, ethnographic, and historical data guide efforts to manage current ecosystems and, in some cases, restore historic ones.

Rationale for Change(s)

Direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. During the conduct of undertakings, the preferred management of sites listed in, nominated to, eligible for, or potentially eligible for the National Register is avoidance and protection. Cultural properties will be protected from damage by project activities through project design, individual site identification, protection measures, training, monitoring and coordination with law enforcement staff. Unevaluated sites will be managed as if eligible unless consultation with the State Historic Preservation Officer indicates otherwise. Management will attempt to achieve a "No Effect" determination in undertakings. When this is not feasible, a "No Adverse Effect" determination will be the preferred standard. This may include cases where consultation with the SHPO indicated that data recovery and interpretation are appropriate. The procedures in 36 CFR 800 will be followed in reaching a management decision. (page 29)

Revised Forest Plan Direction

FW DCs for Cultural Resources (page 87):

- Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance.
- As appropriate, historically significant cultural properties are listed on the National Register of Historic Places. The Coronado's priority cultural resource assets are protected and preserved. Archaeological, ethnographic, and historical data guide efforts to manage current ecosystems and, in some cases, restore historic ones.

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

4. The interaction between cultural and other resources for any specific undertaking will be evaluated in project-level analyses. Where resource management conflicts occur, the desirability of in-place preservation of cultural resources will be weighed against the values of the proposed land use. Preservation of cultural resources in-place will become increasingly important under the following conditions: (page 29)

- where present methods of investigation and data recovery cannot realize the current research potential of the site;
- where the sites are likely to have greater importance for addressing future research questions than current ones;
- where the cultural values derive primarily from qualities other than research potential, and where those values are fully realized only when the cultural remains exist undisturbed in their original context(s), (e.g., association with significant historical persons or events, special ethnic or religious values, or unique interpretive values);
- where cultural resources are important primarily for the quality of their architecture and the integrity of their setting;
- where preservation in-place is necessary to accomplish the objectives of the State Historic Preservation Plan;
- where site density would make data recovery economically infeasible, or require unattainable operating conditions.

Revised Forest Plan Direction

FW DCs for Cultural Resources (page 87):

- Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance.
- As appropriate, historically significant cultural properties are listed on the National Register of Historic Places. The Coronado's priority cultural resource assets are protected and preserved. Archaeological, ethnographic, and historical data guide efforts to manage current ecosystems and, in some cases, restore historic ones.

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

5. The Forest cultural resources history overview is complete and will be updated and augmented with interviews and archival information. The general prehistory overview for Southeastern Arizona will be reviewed and expanded in order to provide specific background and management information for Forest cultural resources. (page 30)

Revised Forest Plan Direction

None

Rationale for Change(s)

Unclear whether this is a ST, OBJ, or MA. Overly prescriptive at the forest plan level.

1986 Plan Content

6. The Forest will participate with other Forests in development of a cultural resources allocation process to assign sites to appropriate management categories. In consultation with the State Historic Preservation Officer, cultural resources will be allocated to management categories. (page 31)

Revised Forest Plan Direction

None

Rationale for Change(s)

Unclear whether this is a ST, OBJ, or MA. Overly prescriptive at the forest plan level.

1986 Plan Content

7. The Forest will nominate to the National Register at least two sites per year for each full-time professional archeologist employed in the Forest cultural resources management program, or one thematic or multiple-property nomination per year. Sites determined eligible for the National Register will be inspected periodically, unless previous data recovery is considered complete. Sites listed on the National Register will be inspected at least biennially. (page 31)

Revised Forest Plan Direction

FW OBJs for Cultural Resources (page 87):

- Nominate at least five individual sites or at least two districts to the National Register of Historic Places within 10 years of plan approval.
- Inspect each priority heritage asset at least once every 5 years.

Rationale for Change(s)

Revised as FW OBJ.

1986 Plan Content

8. The Forest will provide for the stabilization of cultural resources with priorities determined by National Register status, the inherent scientific and interpretive values of the resource, and the feasibility of current technology to arrest further deterioration. (page 31)

Revised Forest Plan Direction

FW OBJ for Cultural Resources: Conduct stabilization or preservation activities at one or more priority heritage assets each year. (page 87)

Rationale for Change(s)

Revised as a FW OBJ with defined targets.

1986 Plan Content

9. A cultural resources professional will inspect each site that may be affected by an undertaking. At least 20 percent of the sites designated for protection within each undertaking, including all National Register and eligible properties, will be inspected by a cultural resources specialist, sale administrator, contracting officer's representative, or project inspector. If damage to a cultural resource is discovered, the procedures in the Forest Service Manual and Forest Service Handbook 2309.24 will be followed. (page 31)

Revised Forest Plan Direction

None

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F). Project-level decisions will be determined on a site-specific basis.

1986 Plan Content

10. Appropriate measures will be developed to protect cultural resources form deterioration due to natural forces, visitor use, and vandalism. Protective measures may include: signing, fencing, administrative closures, patrolling, interpretive signs, and stabilization or data recovery. Contracts, permits, and leases which have the potential to affect cultural resources will include appropriate clauses on protection responsibilities and liability for damage. (page 31)

Revised Forest Plan Direction

FW MA for Cultural Resources: Developing appropriate measures to protect cultural resources from deterioration due to natural forces, visitor use, and vandalism. Protective measures may include signing, fencing, administrative closure, patrolling, interpretive signs, landscape treatments and revegetation projects, and stabilization or data recovery. (page 88)

FW GD for Cultural Resources: Contracts, permits, and leases that have the potential to affect cultural resources should include appropriate clauses on protection responsibilities and liability for damage. (page 87)

FW DCs for Cultural Resources (page 87):

- Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance.
- As appropriate, historically significant cultural properties are listed on the National Register of Historic Places. The Coronado’s priority cultural resource assets are protected and preserved. Archaeological, ethnographic, and historical data guide efforts to manage current ecosystems and, in some cases, restore historic ones.

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Project-level decisions and protection measures will be determined on a site-specific basis.

1986 Plan Content

11. The Forest will pursue opportunities to interpret cultural resources to the public. On-site interpretation will include interpretive trails, signs, exhibits, and self-guided and specialist-guided tours at historic and prehistoric sites. Off-site interpretation will include lectures, professional reports and publications, brochures, programs, and displays. Interpretation of cultural resources will be integrated with other resource interpretation and with other recreation facilities and programs. The Forest will pursue opportunities to develop cooperative efforts with other Federal and State agencies interested in cultural resource interpretation, such as the Bureau of Land Management and other national forests, and with private partners. (page 31)

Revised Forest Plan Direction

FW MA for Cultural Resources: Pursuing opportunities to interpret cultural resources to the public. Onsite interpretation can include interpretive trails, signs, exhibits, or self-guided and specialist-guided tours at historic and prehistoric sites. Offsite interpretation can include lectures, professional publications, brochures, programs, and displays. Interpretation of cultural resources can be integrated with other resource interpretation and with recreation facilities and programs. The Forest Service can pursue opportunities to develop cooperative efforts with other Federal and State agencies interested in cultural resource interpretation, such as the Bureau of Land Management and other national forests, and with private partners. (page 88)

FW DCs for Cultural Resources (page 87):

- Forest facilities that are eligible for the National Register of Historic Places are available for continued use, for Forest Service administration, public recreation and interpretation, and tribal events, as appropriate.
- Collaborative partnerships and volunteer efforts are developed and maintained to assist the Forest Service in managing its cultural resources.

FW OBJs for Cultural Resources (page 87):

- Host, sponsor, or participate in at least two interpretive events for the public every year.
- Provide opportunities for volunteers to participate in heritage resource conservation activities at two to five archaeological sites or historic properties every year.

Other FW MAs for Cultural Resources (page 88):

- Maintaining and enhancing coordination and cooperation with other land management agencies, tribes, and public-private alliances that advance the stewardship of the Nation's diverse heritage. Cooperative efforts can include: (1) fostering the educational, aesthetic, inspirational, cultural, and economic benefits of historic preservation and conservation as outlined in the Arizona State Historic Preservation Plan; (2) encouraging public interpretation at historic sites where it contributes to the region’s sense of community and intercultural understanding; and (3) facilitating cross-boundary heritage tourism to contribute to the region’s economy and sense of place.
- Maintaining and enhancing the partnerships with tribes, universities, professional organizations, and volunteers who play an integral role in the management of cultural resources.

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by DCs, OBJs, and other MAs.

1986 Plan Content

12. The Forest will conduct inventories in areas where the need has been identified in the Forest Planning Assessment. Priorities will be based on management needs, i.e. where inventory information is necessary to avoid potential conflicts with other uses, to predict site distribution and density, to prepare National Register nominations, or to develop interpretation for sites. (page 31-1)

Revised Forest Plan Direction

FW MA for Cultural Resources: Prioritizing areas for nonproject-related survey as follows: (1) areas suspected to have high site density; (2) areas suspected to have underrepresented site types; (3) areas of traditional importance to tribes; (4) areas where site densities or ongoing impacts are unknown and need to be assessed; and (5) areas subject to future development and disturbance. (page 88)

FW OBJ for Cultural Resources: Complete 200 acres of nonproject inventory each year, so that the Coronado's currently unidentified cultural resources can be recorded, evaluated, and protected. (page 87)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by OBJ for Cultural Resources.

1986 Plan Content

13. The Forest will maintain architectural National Register properties in accordance with the Secretary of Interior's standards and guidelines. Historic values will be considered in the development and modification of facilities. Programmatic Memoranda of Agreement will be developed for the maintenance and treatment of structures listed in the National Register to ensure proper long-term treatment and facilitate consultation with the State Historic Preservation Officer. (page 31-1)

Revised Forest Plan Direction

FW MA for Cultural Resources: Managing architectural properties that are listed on or eligible for the National Register of Historic Places for maintenance, rehabilitation, and reuse, in accordance with the Secretary of the Interior's standards and guidelines. (page 88)

FW GD for Cultural Resources: Historic values should be considered in the development and modification of facilities. (page 87)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by GD and existing law, regulation, and policy (see appendix F).

Wildlife and Fish: Habitat Requirements and Agency Cooperation

1986 Plan Content

1. Maintain or improve occupied habitat of commonly hunted species, listed threatened and endangered species, and management indicator species through mitigation of Forest activities with cooperation of New Mexico Department of Game and Fish, Arizona Game and Fish Department, and US Fish and Wildlife Service. Where applicable, consult with other wildlife and plant oriented groups and affected agencies. (See appendix H for minimum desired habitat acres.) (page 31-1)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements (page 67).

FW MAs for Animals and Rare Plants (page 68):

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management.

Although not a plan decision, this subject is also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with … these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Revised as multiple decisions to address wildlife, fish, and plant habitat needs; and coordination and consultation with agencies and partners. Appendix H from the 1986 forest plan was not carried forward as it is overly prescriptive at the forest plan level. The revised forest plan provides direction for habitat conditions by vegetation community and for select species across the Coronado National Forest.

Wildlife and Fish: Animal Damage and Plant Control

1986 Plan Content

2. Coordinate where needed, animal damage and plant control on Forest Service administered lands with the US Fish and Wildlife Service and State wildlife and plant agencies. (page 31-1)

Revised Forest Plan Direction

FW MA for Animals and Rare Plants:

- Coordinating with Animal and Plant Health Inspection Service Wildlife Services and State and Federal wildlife agencies to resolve wildlife resource conflicts on Forest Service administered lands. (page 68)

FW DC for Animals and Rare Plants: Human-wildlife conflicts are rare. Nonnative species occur only where populations are manageable and/or desirable; generally, they are rare across the Coronado. (page 67)

FW MAs for Animals and Rare Plants (page 68):

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management.

FW MA for Invasive Species: Eradicating or managing invasive species with a coordinated approach using integrated pest management. (page 69)

FW MA for Vegetation Communities: Prioritizing existing invasive plant, insect, and pathogen species for eradication, containment, or control. Developing resistance in host species when eradication, containment, or control is not possible. (page 23)

Although not a plan decision, this subject is also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with … these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Addressed by multiple FW decisions. Animal damage and pest control are the primary responsibility of the Animal and Plant Health Inspection Service.

Wildlife and Fish: Project Mitigation

1986 Plan Content

3. Maintain or improve current vegetative diversity (numbers of plant associations and species occurrence) by mitigation of Forest activities. (See appendix H for desired acres.) (page 31-1)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

FW Landscape Scale DC for Vegetation Communities: Landscapes provide for the full range of ecosystem diversity at multiple scales and are composed of multiple vegetation communities. Each vegetation type contains a mosaic of vegetative conditions, densities, and structures. (page 21)

Rationale for Change(s)

Unclear whether this is a DC, OBJ, ST, or GD. Appendix H from the 1986 forest plan was not carried forward as it is overly prescriptive at the forest plan level. The revised forest plan provides direction for habitat conditions by vegetation community and for select species across the Coronado National Forest. Project-level decisions and design criteria including protection measures will be determined on a site-specific basis.

Wildlife and Fish: Threatened and Endangered Species and Agency Cooperation

1986 Plan Content

4. With cooperation of Federal, Arizona, and New Mexico wildlife agencies, develop overall direction for listed threatened and endangered species. (See appendix G). Delist Federally and State-listed threatened and endangered species in accordance with species recovery plans. Reoccupy historical habitat Forestwide with other identified species. (page 31-1)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MAs for Animals and Rare Plants (page 68):

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management.

FW MA for Animals and Rare Plants: Considering the reintroduction of extirpated species to habitats that are reasonably assured to remain suitable through climate change. (page 68)

Although not a plan decision, agency cooperation is also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with… these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Primary direction for listed species is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Delisting of species is the authority of the U.S. Fish and Wildlife Service. Revised decisions for reintroduction of species are listed below (#5).

Wildlife and Fish: Species Reintroductions

1986 Plan Content

5. Reintroduce extirpated native species into historical habitats in accordance with cooperative interagency plans. (page 31-1)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Native species that are known to have been present during the first decade of the 21st century continue to exist. (page 67)

FW MAs for Animals and Rare Plants (page 68):

- Considering the reintroduction of extirpated species to habitats that are reasonably assured to remain suitable through climate change.
- Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing.

FW ST for All Designated Wilderness Areas: Reintroductions shall only occur when a species is determined to be indigenous to the area. (page 107)

Rationale for Change(s)

Revised decisions account for climate change and wilderness areas.

Wildlife and Fish: Agency Consultation

1986 Plan Content

6. Consult with the New Mexico Department of Game and Fish, New Mexico Department of Natural Resources, Arizona Game and Fish Department, and US Fish and Wildlife Service during the environmental analysis process on projects significantly affecting wildlife and threatened and endangered plant habitats. Specific agency responsibilities are described in FSM 2610 (Wildlife and Fish Cooperative Relations) and 2670 (Threatened and Endangered Plants and Animals) an in the Endangered Species Act. Where applicable consult with other wildlife and plant oriented groups (such as State Heritage Programs) and affected Federal agencies. (page 31-1)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW MAs for Animals and Rare Plants (page 68):

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management.

Although not a plan decision, agency cooperation also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with … these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Addressed broadly as a GD and more explicitly as MAs. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives. Further direction provided by existing law (ESA), regulation, and policy (see appendix F).

Wildlife and Fish: Threatened and Endangered Species Inventory

1986 Plan Content

7. Determine presence of Federally and State listed threatened and endangered plant and animal species in project areas through on-site inventory and consultation with existing databases as part of environmental analysis completion. Recommendations for habitat needs will be made on a project-by-project basis. (page 31-1)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements.(page 67)

Rationale for Change(s)

Further direction provided by existing law (ESA), regulation, and policy (see appendix F). Project-level decisions and protection measures will be determined on a site-specific basis.

Wildlife and Fish: Threatened and Endangered Species Management Plans

1986 Plan Content

8. In cooperation with the US Fish and Wildlife Service, Arizona Game and Fish Department, and New Mexico Department of Game and Fish, develop a general activity plan for State and

Federally listed threatened and endangered species. This directional plan would guide habitat management on the Coronado National Forest by: (page 32)

(1) determining critical habitat for threatened and endangered species and prescribing measures to prevent the destruction or adverse modification of such habitat;

(2) recommending appropriate conservation measures including the designation of special areas to meet the protection and management needs of such species;

(3) prioritizing completion of recovery plans on Memorandums of Understanding by species; and

(4) establishing a timeframe for (3) above.

Habitat requirements, research needs, and transplant goals with completion dates would be outlined for each species within its recovery plan (See appendix G).

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Primary direction for listed species is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Designating critical habitat and developing recovery plans, goals, and strategies are the authority of the U.S. Fish and Wildlife Service. However, the Forest Service generally provides input on these plans and decisions.

Wildlife and Fish: Threatened and Endangered Species Habitat Management

1986 Plan Content

9. Develop management plans for designated endangered species critical habitat on site-by-site basis as species recovery plans are completed. Habitat management for Federally listed species will take precedence over unlisted species. Habitat management for endangered species will take precedence over threatened species. Habitat management for sensitive species will take precedence over non-sensitive species. (page 32)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Unclear whether the 1986 forest plan direction is a DC, ST, OBJ, or GD. Addressed broadly as a GD for listed species in the revised forest plan. Other direction is provided by existing law (see appendix F), regulation, and policy. For federally listed species and regionally sensitive species, ESA has the highest authority. Therefore, protection of listed species would have precedence over sensitive species. More explicit direction (ST, GD, etc.) is provided by species in the revised forest plan.

Wildlife and Fish: Transplants

1986 Plan Content

10. In cooperation with Arizona and New Mexico wildlife agencies develop an activity plan for transplanting other native species into historically occupied habitat. This directional plan would guide habitat management on the Coronado National Forest by: (page 32)

(1) prioritizing relocation sites Forestwide by species;

(2) developing habitat management plans and Memoranda of Understanding for relocation sites;

(3) establishing a schedule for completion of (1) and (2) above.

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Native species that are known to have been present during the first decade of the 21st century continue to exist. (page 67)

FW MAs for Animals and Rare Plants (page 68):

- Considering the reintroduction of extirpated species to habitats that are reasonably assured to remain suitable through climate change.
- Cooperating with State and Federal agencies, counties, and municipal governments, and nongovernment organizations to reestablish extirpated species, recover federally listed species, and to manage Forest Service sensitive species in a way that prevents trends toward Federal listing.

FW Standard for All Designated Wilderness Areas: Reintroductions shall only occur when a species is determined to be indigenous to the area and when it was extirpated by human-induced events. (page 105)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Revised decisions account for climate change and wilderness areas.

Wildlife and Fish: Population Viability

1986 Plan Content

11. Evaluate through consultation with Arizona Game and Fish, New Mexico Departments of Game and Fish and Natural Resources, along with other wildlife and plant oriented groups where appropriate, population viability of management indicator species through determination of: (page 32)

(1) amount of suitable habitat;

(2) distribution of suitable habitat;

(3) number of individuals that support regional population goals; and

(4) likelihood of continued existence.

Revised Forest Plan Direction

FW MAs for Animals and Rare Plants (page 68):

- Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor wildlife, fish, and rare plant species occurring on National Forest System lands.
- Maintaining strong partnerships between the Forest Service, State and Federal agencies, county and local governments, and nongovernmental organizations to accomplish conservation planning and management.

Although not a plan decision, agency cooperation is also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with… these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Primary direction for wildlife and plant species, including management indicator species, is provided by existing law (ESA), regulation, and policy (see appendix F).

Wildlife and Fish: Mitigation

1986 Plan Content

(pages 32 to 37)

12. Mitigate impacts on wildlife and plant diversity by applying the following standards and guidelines to the appropriate management activities. Wildlife species to be featured are shown for each individual management area.

(a) **Mineral entry and oil and gas exploration**

(1) Leave buffers around watering and feeding areas for escape and hiding cover. Buffer widths vary with the site but must be wide enough to screen affected wildlife from the project site.

(2) Rehabilitate site after entry using mixture of forage and cover plant species.

(3) Within occupied habitat of threatened and endangered species:

(a) Specific recommendations made on site-by-site basis. Recommendations vary from seasonal limitations to no construction permitted or mineral withdrawal.

(b) **Recreation**

(1) Trails

(a) New Construction

1. Leave one mile buffer around peregrine falcon eyrie locations and other critical raptor nesting sites.

2. Route around rock talus slopes

(b) Maintenance of existing trails

1. Minimum maintenance within one mile of peregrine falcon eyrie location.

2. Limit maintenance to between October 1 and February 1 within one mile of peregrine falcon.

(2) Recreation use

(a) Establish species tolerance levels on a project site-by-site basis.

(c) **Fuelwood Harvest**

(1) Follow old growth standards and guidelines per the regional standards and guidelines depicted at the beginning of chapter4 (Plan pages 22 to 23). Old growth characteristics have been placed in tabular form (Plan page 24).

(a) Retention areas will emphasize hiding, escape, bedding, and thermal cover around feeding and watering areas, in drainages, and along roads. Leave strips vary in size from 50 to 200 feet depending on density by existing vegetation.

(b) Retention areas will emphasize leaving mast and berry producing trees n the same mixtures of mature and overmature species as in pretreatment stand.

(2) In Mexican spotted owl and northern goshawk habitat, manage other tree age classes per regionwide guidelines depicted at the head of chapter4 (Plan pages 15 to 22). In other areas manage other tree classes as follows:

Poles: greater than or equal to 20 percent of the stand

Sapling and seedling: less than or equal to 60 percent of the stand.

(3) Maintain 3 or more cavity bearing live trees and 3 or more snags or decadent trees per acre. Tree diameters at breast height will be at least 12 inches through rotation period, where feasible.

(4) Meander cutting block boundaries following natural lines for greater edge effect.

(5) In fuelwood stands yielding less than 4 cords per acre at end of rotation, leave 50 percent of trees with diameter breast heights less than 4 inches for thermal, hiding, and escape cover, and as growing stock.

(6) Retain all age classes of riparian species (defined in FSM 2526, Riparian Watershed Management) and madrone.

(7) Control livestock and recreation use in stands for two growing seasons or more after harvest to establish vegetative regeneration.

(8) Retain two turkey roosts per square mile. A roost will include at least 7 trees with 12-inche diameters and 30-foot heights or greater within one-half mile of water.

(9) Leave at least two slash piles as cover or nest sites within one-half mile of water. In turkey and Mearn's quail habitats, lop and scatter the slash.

(10) Retain 150 foot vegetation buffers around raptor nests and colonial turkey vulture and owl roost sites.

(11) In high density Mearn's quail habitat, leave 15 acres of uncut tree stands interspersed with openings less than 150 feet in width. Utilization of forage by livestock will not exceed 45 percent by weight. In lower density habitat follow guidelines (1), (2), (4), (5), (6) and (7) above.

(12) In identified threatened and endangered species habitat, the above standards and guidelines will be modified, if necessary, on a site-by-site basis.

(d) **Roads**

(1) Limit density of existing and new road construction to one mile of road or less per square mile.

(2) Close and reseed temporary fuelwood roads after harvest.

(3) Establish tolerance levels for State and Federally listed threatened and endangered species for new construction and maintenance of roads on project-by-project basis.

(e) **Range Management**

(1) Provide wildlife input into allotment management plans in order to:

(a) Maintain wildlife and livestock utilization of perennial vegetation at levels established in FSM 2209.21 (Range Analysis and Management Handbook).

(b) Provide for one water per section available to wildlife yearlong.

(c) Provide for wildlife passage through fences by:

1. Building fences with 4 wires or less with bottom wire 16 inches off ground, top wire 12 inches above second wire, and fence height less than or equal to 42 inches.

2. Providing crossings at established antelope travel routes.

(f) **Range and Water Rehabilitation Projects**

(1) Leave strips of existing vegetation in drainages and around waters. Width varies with density of existing vegetation but adequate hiding, escape, bedding, and thermal cover is usually provided with strips of 50 to 150 feet wide.

(2) Construct 2 slash piles within one-half mile of water. In turkey and Mearn's quail habitats, lop and scatter the slash.

(3) Retain all non-targeted plant species, (such as cacti and agaves) within limits of treatment method.

(4) Include plant species for wildlife in reseeding mixture.

(g) **Other Forest Products Harvest**

(1) Beargrass

(a) Harvest areas less than 6 acres when removing 100 percent of plants.

(b) Reentry at least 2 years after initial treatment.

(c) Selectively harvest only one out of three plants in drainages.

(d) No harvest during Merriam's and Gould's turkey nesting and brooding periods in occupied turkey habitats.

(2) Yucca, Cactus, Ocotillo, etc.

(a) Harvest permitted on site-by-site basis.

(h) **Timber Harvest**

(1) Maintain basal area and age-class distributions as shown in silvicultural guidelines for timber harvest in Management Area 2.

(2) Retain current acres of meadows.

(a) Route timber haul roads around meadows.

(b) Restrict off-road vehicle use to designated roads.

(c) Leave 50 to 150 feet buffers around meadows to provide thermal, escape, and hiding cover.

(3) Leave 3 or more snags of at least 20 inches diameter breast height per acre through rotation period.

(4) Meander harvest block boundaries to create greater edge effect.

(5) Retain all age classes of riparian species (defined in FSM 2526 - Riparian Watershed Management) and madrone.

(6) Control livestock and recreation use in stands for 2 or more growing seasons after harvest to allow vegetative regeneration.

(7) Leave 50 to 150 feet or more vegetation buffers around waters and along roads and drainages to provide thermal, escape, bedding, and hiding cover. Width varies with density of existing vegetation.

(8) Retain 150 foot buffers around raptor nests.

(9) Manage for two turkey roosts per section over rotation period. Roosts will include at least 7 trees with 20 inch diameter breast heights and 50 foot heights or greater on a one-fourth acres area. Roost sites will have at least a basal area of 120 and be within a one-half mile of water.

(10) In harvest stands, lop and scatter slash within one-half mile of water.

(11) Manage aspen as follows:

(a) 40 percent of stand has aspen and conifer basal area greater than or equal to 161; 30 percent greater than or equal to 81, but less than 160; 30 percent less than or equal to 80.

(b) 20 percent of canopy cover retained in overmature or mature age classes.

(c) Leave 3 cavity bearing overmature and mature trees and 3 snags with diameter breast heights greater than 10 inches per acre during the 80-year rotation period.

(d) Regeneration areas will be less than 6 acres.

(12) Gambel oak

(a) Retain 40 percent of canopy cover (compared to total enclosure) as mature and overmature; less than or equal to 30 percent as poles; and less than or equal to 30 percent as seedlings/saplings.

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW DCs for Minerals (pages 71 and 72):

- Opportunities for environmentally sound minerals development are available.
- Important wildlife habitats and areas where appropriated funds have been expended are protected through legally appropriate methods from locatable mineral activities.
- Adverse surface resource impacts are minimized through the appropriate administration of mineral laws and regulations.
- All mineral exploration and mining activities are operating in environmentally sound ways through protection and mitigation measures, including adequate post-mining reclamation assurances, to minimize environmental impacts to other national forest resources.
- Abandoned and inactive mines disturbed by past mineral exploration and mine development have been returned to stable conditions and an appropriate, functioning, vegetative state, and do not pose health, safety, or environmental hazards.

FW ST for Minerals: Only native or nonpersistent seed and plant materials will be used when revegetating disturbed sites. (page 72)

FW DCs for Recreation:

- Recreation activities are balanced with the ability of the land to support them and create minimal user conflicts. (page 77)
- Damage to resources from trailheads and trails is minimal. (page 78)

FW GDs for Recreation (page 79):

- Recreation sites should be managed for capacities that do not cause unacceptable resource damage or impact the landscape character.
- When possible, activities that affect visitors should be scheduled outside of the major recreation season.

FW DC for Vegetation Communities: Ecological conditions provide habitat characteristics necessary for associated federally listed species and rare and culturally important plant species. Habitat conditions provide for survival and recovery of species listed under the Endangered Species Act, and contribute to their delisting. (page 22)

Further direction related to habitat structure and conditions is provided by vegetation community. Old growth is defined in detail in the glossary (page 184). Also see revised forest plan direction above related to old growth, riparian, fuelwood and timber harvest, and Mexican spotted owl and northern goshawk management.

FW DCs for Motorized Transportation:

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. (page 74)
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 75)

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and protection measures will be determined on a site-specific basis.

Wildlife Habitat Maintenance, Threatened and Endangered Plant Habitat Improvement, Fish Habitat Improvement, and Nongame Habitat Improvement (Various)

1986 Plan Content

(pages 37 to 38)

1. Maintain wildlife structures to the following guidelines. They are intended to meet specific wildlife habitat objectives as shown for each Management Area. Structures may not exist in every Management Area.

(a) Maintain all water developments every 4 years.

(b) Maintain study plots once every 10 years.

(c) Maintain other structures once every 4 years.

The following structural and nonstructural improvement guidelines are intended to meet the specific wildlife habitat objectives as shown for each Management Area. They may not be applicable for every Management Area.

Nonstructural Wildlife Improvements

(a) Prescribe burn feasible areas on a 20-year cycle.

(b) Seed suitable wildlife forage species as needed in fuelwood and timber areas.

(c) Transplant listed threatened and endangered and other identified species into suitable habitat following guidelines of species recovery plans and Memoranda of Understanding.

(d) Revegetate wildlife areas with wildlife forage, cover, and riparian species. Native species should be used when available.

(e) Thin or patch cut an average of 10 acres of aspen, gambel oak, and timber species per year.

Structural Wildlife Improvements

(a) Construct water developments or potholes to accomplish 1 per section within 4 decades.

(b) Consider structural improvements and maintenance for threatened and endangered species as technology develops.

(c) Construct fish habitat improvement structures as needed for threatened and endangered species.

(d) Fence riparian areas where prescribed by approved allotment management plans. Miles of fence constructed will vary with management plan.

Revised Forest Plan Direction

FW DCs for Constructed Waters (page 61):

- Artificial structures for holding standing water (such earthen stock ponds, reservoirs, wildlife drinkers, concrete or steel storage tanks or watering troughs, and habitat restoration ponds) are distributed across the landscape in a pattern and density sufficient to sustain wildlife and livestock.
- Water sources are perennial where possible, providing a high-quality supply of water and aquatic habitat for plants and animals.
- Constructed waters that are used for livestock watering are available for and used by native species.

FW GD for Constructed Waters: Artificial waters constructed for livestock should be designed and/or retrofitted to provide a year-round drinking and habitat resource for native wildlife. (page 62)

FW MA for Constructed Waters: Cooperating with range permittees and State wildlife management agencies to maximize the benefits of artificial water developments for all uses. (page 62)

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW GD for Fire in Wilderness: Prescribed fire should be used to create conditions that enable naturally occurring fires to return to their historic role or to achieve wilderness area desired conditions. (page 106)

FW GD for Natural Water Sources: Projects affecting perennial streams should be designed and constructed to allow for the natural instream movement of native fish, except where barriers are necessary to preclude the movement of nonnative species. (page 60)

FW GD for Range Management: Treatments for restoring rangelands should emphasize the use and perpetuation of native plant species. (page 91)

FW ST for Scenery: Only native or nonpersistent seed and plant materials will be used when revegetating disturbed sites. (page 72)

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

FW DC for Range Management: Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes. (page 91)

FW ST for Range Management: New issuance, renewal, modification, and management of grazing permits shall comply with the Coronado National Forest's "Stockpond and Aquatic Habitat Management and Maintenance Guidelines for the Chiricahua Leopard Frog." Additionally, for the San Rafael Valley and surrounding areas, permits shall comply with the Coronado National Forest's "Stockpond Management and Maintenance Plan for the Sonora Tiger Salamander." (page 91)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and protection measures will be determined on a site-specific basis.

Range Management: Project And Allotment Planning

1986 Plan Content

1. Priority for allotment management planning will be given to areas with opportunity to reverse range deterioration or to increase permitted numbers.

2. Priority for range improvements goes to allotments with approved plans and where cost effective. (page 38)

Revised Forest Plan Direction

FW DC for Range Management: The Coronado National Forest provides forage for grazing in support of domestic livestock production as a viable, sustainable economic activity. (page 90)

FW MAs for Range Management (page 92):

- Reviewing current management of each active allotment at least once every 3 to 5 years to identify consistency with current grazing authorization decisions (completed according to National Environmental Policy Act requirements).
- Annually meeting with permittee to discuss timing, intensity, duration, and frequency of livestock use, as well as infrastructure needs.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by broader decisions and existing policy and guidance (see appendix F).

Range Management: Directives

1986 Plan Content

(page 38)

3. Specific standards and guidelines for livestock grazing operations are those contained in:

- Regionwide Standards and Guidelines (Plan page 22)
- FSH 2209.21 (Range Analysis Handbook)
- FSH 2209.22 (Structural Range Improvement Handbook)
- FSH 2209.23 (Nonstructural Range Improvement Handbook)
- FSM 2323 (Grazing Management in Wilderness)

Revised Forest Plan Direction

Appendix E (Other Sources of Information) lists key Forest Service directives, laws, and regulations relevant to range management. (pages 263 and 264)

Rationale for Change(s)

Reiterates existing policy and guidance (see appendix E).

Range Management: Galiuro Mountains

1986 Plan Content

4. Discontinue livestock grazing in Redfield Allotment (Galiuro Mountains) due to economic and ecological reasons. (page 38)

Revised Forest Plan Direction

FW ST for Range Management: Grazing permits for domestic goats and/or sheep will not be issued in the Santa Teresa, Winchester, Galiuro, and Santa Catalina Ecosystem Management

Areas to prevent the transfer of disease from domestic goats and sheep to wild populations of bighorn sheep. (page 92)

FW GDs for Range Management (page 91):

- Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes.
- Grazing intensity, frequency, occurrence, and period should provide for growth and reproduction of desired plant species while maintaining or enhancing habitat for wildlife.
- Forage utilization should be based on site-specific resource conditions and management objectives, but in general should be managed at a level corresponding to light to moderate intensity (15 to 45 percent of current year's growth).
- Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 90)

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements.(page 67)

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

Rationale for Change(s)

Decision not carried forward, addressed by livestock class restriction and other decisions related to resource protection and range management.

Timber Management: Fuelwood and Other Products

1986 Plan Content

1. Coordinate fuelwood programs, to the extent possible, with those on adjacent lands.

2. Complete fuelwood and Christmas tree inventories. (page 38)

Revised Forest Plan Direction

FW DC for Forest Products: A sustainable supply of wood products (e.g., small roundwood, sawlogs, biomass, fuelwood) and other products (e.g., Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. Forest products, particularly those related to wood fiber, are made available as part of fuel treatment projects and restoration activities. (page 70)

FW MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Ensuring the continued sustainability of special forest products, such as tree boughs, fuelwood, posts and poles, wildflowers, mushrooms, grasses, seeds, nuts, cones, and berries through monitoring commercial sales and free use permit harvest levels.

Although not a plan decision, coordination is also addressed under Appendix B, Proposed and Probable Management Practices, Cooperation with Tribal Groups and Agencies, as follows: The Coronado National Forest will cooperate with. . . . these agencies [Arizona Game and Fish Department, New Mexico Department of Game and Fish, and U.S. Fish and Wildlife Service] in order to carry out management activities. (page 228)

Rationale for Change(s)

Revised as FW DC and MAs. Further direction provided by existing policy and guidance (see appendix F).

1986 Plan Content

4. Fuelwood and other forest products, such as beargrass and manzanita, will be made available to residents of Mexico when not fully utilized by U.S. citizens. (page 38)

Revised Forest Plan Direction

FW MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Ensuring the continued sustainability of special forest products, such as tree boughs, fuelwood, posts and poles, wildflowers, mushrooms, grasses, seeds, nuts, cones, and berries through monitoring commercial sales and free use permit harvest levels.

Rationale for Change(s)

Addressed by FW MAs for Forest Products.

Timber Management: Enhancement of Other Resources

1986 Plan Content

3. Timber management priorities are to enhance wildlife and recreational resources. (page 38)

Revised Forest Plan Direction

FW ST for Forest Products: On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety. (page 70)

FW GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

Multiple FW GDs for Scenery related to vegetation management and forest health improvement projects. (pages 82 and 83)

Further direction related to habitat structure and conditions is provided by vegetation community. Old growth is defined in detail in the glossary (page 184). Also see revised forest plan direction above related to old growth, riparian, fuelwood and timber harvest, and Mexican spotted owl and northern goshawk management.

Rationale for Change(s)

Revised as FW STs and GDs addressing compatibility of timber management with other resources.

Watershed and Soil Maintenance: Water Conservation

1986 Plan Content

1. Use water needed for national forest programs frugally and efficiently. (page 38)

Revised Forest Plan Direction

FW DC for Natural Water Sources: Within the natural capabilities of the water source, water quantity and quality meet the needs of beneficial uses and authorized activities such as domestic and municipal water use, irrigation, stockwater, recreation, wildlife (including fish), road construction and maintenance, and fire management activities. (page 59)

FW GD for Natural Water Sources: Water quality, quantity, soil function and structure, and wildlife habitat (including aquatic species habitat) should be protected or enhanced at natural springs and seeps. (page 60)

FW MAs for Natural Water Sources (page 60):

- Actively working with agencies and partners to acquire and maintain water rights, including instream flow water rights.
- Actively participating in the Gila River water rights adjudication to meet water needs for beneficial uses such as stockwater, recreation, wildlife, irrigation, domestic water use, and other authorized activities.

Rationale for Change(s)

Revised as FW direction for Watersheds and Natural Water Sources. Further direction provided by existing law, regulation, and policy (see appendix F).

Watershed and Soil Maintenance: Improvement and Planning

1986 Plan Content

2. First priority for watershed improvement projects goes to unsatisfactory watershed condition.

3. Complete watershed analyses and watershed restoration action plans. (page 38)

Revised Forest Plan Direction

FW MA for Soil: Prioritizing watershed improvement projects based on implementing objectives for vegetation communities. (page 63)

FW OBJ for Soil: Every 10 years enhance or restore 2,500 to 15,000 acres of uplands with vegetation treatments or soil and watershed restoration treatments to attain necessary ground cover by litter and ground cover by plant basal area. (page 63)

Rationale for Change(s)

Revised direction based on vegetation community objectives and included a measurable objective for upland enhancement and restoration.

Watershed and Soil Maintenance: Effects From Other Projects

1986 Plan Content

4. In all aspects of planning (budget, long-range, coordination with other agencies, coordination with other disciplines within the Forest Service and cooperation with research) watershed will be represented. Plans will be sensitive to maintaining or improving watershed conditions. (page 38)

Revised Forest Plan Direction

FW DCs and MAs for Watersheds: Water resource desired conditions, objectives, guidelines, and management approaches are outlined in the forest plan in the “Vegetation Communities,” “Natural Water Sources,” “Constructed Waters,” “Soil,” “Animals and Rare Plants,” “Invasive Species,” “Motorized Transportation System,” “Recreation,” and “Range Management” sections.

Rationale for Change(s)

Revised as FW direction for watersheds and associated resource/subject areas. Direction also provided by existing law, regulation, and policy (see appendix F).

Watershed and Soil Maintenance: Project BMPs

1986 Plan Content

5. Through management services, provide information to minimize disturbance and improve already-disturbed areas. Best management practices will be used to minimize the time of recovery to a satisfactory erosion level, minimize soil productivity loss, improve water quality, and minimize channel damage. (page 38)

Revised Forest Plan Direction

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

FW Landscape Scale DC for Natural Water Sources- Water quality, stream channel stability, and aquatic habitats retain their inherent resilience to natural and other disturbances, including climate variability and change. (page 59)

FW GDs for Natural Water Sources (page :

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources.

FW DC for Soil: Ecological and hydrologic functions are not impaired by reduced soil quality. The soil quality is satisfactory across the forest. (page 63)

FW DC for Soil and Water in Wilderness: Natural processes dominate soil and water cycles in wilderness areas. Water quality is high. Trails and campsites do not contribute soil sediment to downstream water resources. (page 107)

Rationale for Change(s)

Revised as FW direction for watersheds and associated resource/subject areas. Direction also provided by existing law, regulation, and policy (see appendix F).

Watershed and Soil Maintenance: Water Quality Monitoring

1986 Plan Content

6. Monitor designated projects according to an approved water quality monitoring plan. (page 39)

Revised Forest Plan Direction

ST for Soil and Water in Wilderness: Water quality measurements shall be made with temporary use of portable equipment. (page 107)

The Forest Plan Monitoring Strategy identifies monitoring questions related to wildlife and Natural Water Sources and Constructed Waters (page 177).

Rationale for Change(s)

Direction provided by broader decisions and existing policy and guidance (see appendix F). Monitoring needs will be determined on a site-specific basis in accordance with existing policy and guidance.

Watershed and Soil Maintenance: Equipment and Soils

1986 Plan Content

7. Restrict equipment use to terrain and climatic conditions where soil damage will be minimal. (page 39)

Revised Forest Plan Direction

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

FW Landscape Scale DC for Natural Water Sources- Water quality, stream channel stability, and aquatic habitats retain their inherent resilience to natural and other disturbances, including climate variability and change. (page 59)

FW GDs for Natural Water Sources (page 60):

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Management activities should not impair soil moisture recharge at outflows of natural water sources.

FW DC for Soil: Ecological and hydrologic functions are not impaired by reduced soil quality. The soil quality is satisfactory across the national forest. (page 63)

Rationale for Change(s)

Revised as FW direction for watersheds and associated resource and subject areas. Direction also provided by existing law, regulation, and policy (see appendix F).

Watershed and Soil Maintenance: Riparian Value and Protection

1986 Plan Content

(page 39)

8. Manage riparian areas in accordance with legal requirements regarding floodplains, wetland, wild and scenic rivers, and cultural and other resources. Recognize the importance and distinct values of riparian areas in forest plans.

9. Manage riparian areas to protect the productivity and diversity of riparian-dependent resources by requiring actions within or affecting riparian areas to protect and, where applicable, improve dependent resources (FSM 2526). Emphasize protection of soil, water, vegetation, and wildlife and fish resources prior to implementing projects (FSM 2526).

10. Give preferential consideration to resources dependent on riparian areas over other resources. Other resource uses and activities may occur to the extent that they support or do not adversely affect riparian-dependent resources.

Revised Forest Plan Direction

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 52)

Rationale for Change(s)

Revised as FW direction for Riparian Areas. Other direction provided by existing law, regulation, and policy (see appendix F).

Watershed and Soil Maintenance: Inventory and Improvement

1986 Plan Content

(pages 39 and 40)

11. By the end of the first time period, complete classifications and inventories of all riparian areas, and complete action plans to improve all unsatisfactory riparian areas. Improve all riparian areas to satisfactory or better condition by the end of Period 5. Such satisfactory conditions are specified below, expressed as a percentage of "natural" conditions (that is, what each site can produce if not further disturbed by man). Twenty-five percent of all riparian areas must be in satisfactory condition by Period 2.

(a) **Aquatic Resource**

(1) Maintain at least 80 percent of natural shade over water surfaces in fish-bearing streams.

(2) Maintain at least 80 percent of natural bank protection.

(3) Maintain the composition of sand, silt, and clay within 20 percent of natural levels in fish-bearing streams.

(b) **Vegetation Resource** (where the site is capable of supporting woody plants)

(1) Maintain at least 60 percent of the woody plant composition in three or more riparian species.

(2) Maintain at least three age-classes of riparian woody plants, with at least 10 percent of the woody plant cover in sprouts, seedlings, and saplings of riparian species.

(3) Maintain at least 60 percent of natural shrub and tree crown cover.

(c) **Wildlife Resources -** maintain at least 60 percent of natural shade over land surfaces.

12. On a site-specific basis, identify riparian-dependent resources and develop action plans and progress to bring about conditions essential to supporting those dependent resources.

Revised Forest Plan Direction

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

FW OBJ for Riparian Areas: Treat 2,500 to 10,000 acres of uplands every 10 years with vegetation treatments or soil and watershed restoration treatments to maintain watershed stability and, thereby, the structure and function of streams, flood plains, and riparian vegetation. (page 52)

FW GDs for Riparian Areas (page 53):

- Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained.
- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Revised as FW direction for Riparian Areas. Monitoring needs will be determined on a site-specific basis in accordance with existing policy and guidance.

Minerals Management: Roads

1986 Plan Content

1. To the extent possible, avoid construction of roads across sensitive soils and scenic lands. Prohibit the construction of roads across mountain meadows. (page 40)

Revised Forest Plan Direction

FW DC for Minerals: All mineral exploration and mining activities are operating in environmentally sound ways through protection and mitigation measures, including adequate post-mining reclamation assurances, to minimize environmental impacts to other national forest resources. (pages 71 and 72)

FW GDs for Motorized Transportation System (page 76):

- New road construction in meadows and wetlands should be avoided where physically or financially feasible. If these activities are unavoidable, they should be designed and implemented to minimize effects to waterflow, wetland recharge, and ecosystem function.
- Construction of roads across highly erodible soils and areas of high and very high scenic integrity should be avoided unless as needed to meet statutory requirements, such as mining law or laws to protect public health and safety.

FW GDs for Montane Meadows (page 50):

- Management activities in meadows should not be allowed unless impacts to meadow soils and hydrologic function and native plant assemblages can be mitigated.
- Meadows should not be used as long-term staging areas for off-highway vehicles or livestock, or for storage of equipment or forest products.

Rationale for Change(s)

Revised as FW direction for minerals and other resources.

Minerals Management: Legal Framework

1986 Plan Content

2. Mining and leasing activities will be allowed within the framework of applicable laws and regulations including environmental laws and regulations designed to mitigate the impacts of mining activities. Emphasis should be on gaining cooperation and control through the use of operating plans and bonds for rehabilitation to protect and restore surface resources. (page 40)

Revised Forest Plan Direction

FW DC for Minerals: Adverse surface resource impacts are minimized through the appropriate administration of mineral laws and regulations. (page 71)

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Minerals Management: Aggregate Development

1986 Plan Content

3. Exploration and development of common variety minerals for use as aggregate sources must be based on needs identified in transportation plans. Allocation of mineral aggregate will be based on Forest Service needs and the most cost-efficient use of various quality aggregates. Forest Service will have priority before personal or commercial use of aggregate materials. (page 40)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Project-level decisions will be determined on a site-specific basis. Other direction provided by existing policy and guidance (see appendix F).

Human Resource Programs: Accessibility

1986 Plan Content

1. Consider needs of handicapped persons in all new development or redevelopment projects. (page 40)

Revised Forest Plan Direction

GD for Developed Recreation LUZ: As public facilities are constructed or renovated, they should be made more accessible to meet or exceed accessibility guidelines. (page 101)

FW DCs for Recreation (page 77):

- Demand for recreation is accommodated within the capacity of the land to support it, and areas that can accommodate additional use, such as at Peña Blanca Lake, are fully utilized.
- Developed recreation facilities such as campgrounds and picnic areas provide a range of visitor needs; most areas have simple facilities like picnic tables and vault toilets, while some offer additional amenities such as paved roads, flush toilets, and RV hookups.
- Recreation facilities are clean, in good repair, and provide a safe setting for visitors. Most meet accessibility guidelines.

FW MA for Recreation: Using the "Coronado National Forest Transition Plan" and the Forest Service "Outdoor Recreation Accessibility Guidelines" to improve accessibility for visitors.(page 80)

Rationale for Change(s)

Revised as FW direction. Project-level decisions will be determined on a site-specific basis. Other direction provided by existing policy and guidance (see appendix F).

Human Resource Programs: Volunteers

1986 Plan Content

2. Use volunteers to supplement other resource management activities. (page 40)

Revised Forest Plan Direction

Direction for use of volunteers is provided by various resources. Examples include:

- FW MA for Invasive Species: Coordinating the integrated pest management approach with the plans and efforts of other Federal, State, and local agencies, nongovernmental organizations, volunteers, partners, and landowners. (page 69)
- FW OBJ for Recreation: Provide opportunities for volunteers to participate in recreation planning, project implementation, or operations and maintenance at 15 to 30 recreation sites or facilities annually. (page 78)
- FW MA for Recreation: Encouraging local communities, partnerships, volunteers, and permit holders to help manage a sustainable recreation program, and ensuring that partners are recognized for their roles in providing recreational opportunities. (page 79)

- FW OBJ for Cultural Resources: Provide opportunities for volunteers to participate in heritage resource conservation activities at two to five archaeological sites or historic properties every year. (page 87)
- MA for All Designated Wilderness Areas: Coordinating with local user groups to develop a volunteer wilderness stewardship program, emphasizing non-confrontational education and information sharing. (page 105)

Rationale for Change(s)

Revised direction for specific resources.

Land Classification: Ownership Adjustment

1986 Plan Content

(page 40)

1. Capitalize on opportunities to consolidate small private land holdings into economically viable units through land ownership adjustment.

2. Recognize, in the periodic review of Forest land ownership adjustment planning, the public benefits to be gained and the effect of the planning on land adjacent to the Coronado National Forest.

3. Consider all resource values and social needs in doing land adjustment planning.

Revised Forest Plan Direction

FW DCs for Land Ownership Adjustments and Boundary Management:

- The land ownership pattern within the boundaries of the Coronado National Forest is characterized by large contiguous blocks of National Forest System land. Complex and fragmented land ownership patterns have been consolidated through collaborative land adjustments with non-Federal landowners or agencies (State, county, private, and other ownerships). (page 92)
- Existing National Forest System unit boundaries have been modified to provide national forest status to lands acquired, or lands to be acquired from non-Federal (state, county, private, and other ownerships) landowners, located outside unit boundaries, to provide logical exterior unit boundaries, and facilitate current and future management and administration of the Coronado National Forest. (page 93)

FW GDs for Land Ownership Adjustments and Boundary Management:

- Land exchanges should result in an improved land ownership pattern, more effective management of National Forest System lands, and foster sound community development. (page 93)

- The non-Federal lands considered for exchange into Federal ownership should meet one or more of the following criteria: lands that provide needed public and administrative access, protect public lands from fire or trespass, or prevent damage to Coronado resources; lands that will improve public land management, meet specific administrative needs, or benefit other national forest programs; lands that meet programs prescribed or endorsed by acts or reports of Congress or the Department of Agriculture. (page 93)
- Federal lands offered by the United States in a proposed land exchange should meet one or more of the following criteria: lands that provide improved public land management; lands that will improve management, benefit specific resources, or increase management efficiency. (pages 93 and 94)

FW MAs for Land Ownership Adjustments and Boundary Management:

Land Ownership Adjustments (pages 94 and 95)

- Consolidating the National Forest System land ownership pattern through exchange, purchase, or donation, and other land ownership adjustment authorities.
- Acquiring non-Federal lands or interest in lands from non-Federal land owners (state, county, private, and others ownerships) that resolve public access issues, contain vital threatened and endangered species habitat or vital wildlife habitat, are water oriented and/or provide additional public recreational opportunities.

Land Exchanges (page 95)

- Considering opportunities to consolidate small private land inholdings into economically viable units.
- Evaluating the Federal lands to determine the merits of exchanging them into non-Federal ownership. (page 93)

Rationale for Change(s)

Revised as more explicit direction. Decisions related to land ownership adjustments are subject to existing law (National Environmental Policy Act, Federal Land Policy and Management Act, etc.), regulation, and policy (see appendix F).

Land Management Planning: Implementation

1986 Plan Content

1. Carry out the intent and direction contained in the Land and Resource Management Planning regulations and current FSM 1920 Manual direction (Land and Resource Management Planning). (page 40)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Unclear whether this is a ST, GD, MA, etc. Reiterates existing law, regulation, and policy.

Special Use Management: Rights-of-way

1986 Plan Content

1. Make rights-of-way wide enough to safely accommodate the use and its future maintenance. (page 40)

Revised Forest Plan Direction

FW GD for Public Access: Where no legal right of public or administrative access exists (written or unwritten title) or can't be determined, needed right-of-way easements for existing and proposed roads and trails through non-Federal lands (State, county, private, and others) adjacent to, adjoining, within, or a combination thereof, should be acquired using a variety of methods. (page 73)

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F).

Special Use Management: Planning and Mitigation

1986 Plan Content

2. Require site development and rehabilitation plans for uses such as sanitary landfills, dumps, borrow pits, quarries, storage yards, and work camps in order to minimize all resource impacts. (page 40)

Revised Forest Plan Direction

FW DC for Special Uses: Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use. (page 84)

Rationale for Change(s)

Revised as FW direction for all special uses. Project decisions and protection measures will be determined on a site-specific basis.

Special Use Management: Utility Lines and Corridors

1986 Plan Content

(page 40 and 41)

3. Utility lines will be placed underground when necessary to meet the visual quality objective unless this is not feasible because of overriding environmental concerns, costs, and technical considerations. Existing utility lines that do not meet the visual quality objective will be placed underground or realigned when reconstruction becomes necessary.

4. Existing utility and transportation corridors will continue to be used for those types of uses. Every attempt should be made to locate new utilities within those existing corridors that meet the visual quality objective. Existing corridors that do not meet the visual quality objective should be relocated when construction becomes necessary. New corridors shall be located so that the visual quality objectives are met.

Revised Forest Plan Direction

FW GDs for Special Uses (page 86):

- New or reconstructed utility lines should be placed underground when possible to protect scenic resources, unless this is not feasible because of overriding environmental concerns or technical considerations.
- New electric transmission lines and natural gas pipelines should be located in existing corridors that meet the scenic integrity objective. Existing corridors that do not meet the scenic integrity objective should be relocated when construction becomes necessary.

Rationale for Change(s)

Direction carried forward, except for cost factor when burying utility lines.

Special Use Management: Mount Graham Observatory

1986 Plan Content

5. The powerline serving the Mt. Graham International Observatory will be buried. The astronomical observatory permittee will provide electric power capability to Columbine Administrative Site. (page 41)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Overly prescriptive at the forest plan level.

Special Use Management: Access and Safety

1986 Plan Content

6. Public access to special use areas will continue so long as it is consistent with safety and the type of use permitted. (page 41)

Revised Forest Plan Direction

FW GD for Special Uses: Public road or trail access to special use areas such as communication sites should not be restricted unless there are security, safety, or other concerns. (page 86)

FW DC for Special Uses: Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use. (page 84)

Rationale for Change(s)

Direction carried forward, adding security consideration.

Special Use Management: Environmental Effects

1986 Plan Content

7. Land occupancy and use authorizations will be evaluated in light of their effects on the management, protection, development, and utilization of the resources and the long-term public interest in full recognition and response to the requirements and intent of the National Environmental Policy Act. (page 41)

Revised Forest Plan Direction

FW DC for Special Uses: Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use. (page 84)

Rationale for Change(s)

Revised as FW direction for all special uses. Project decisions and protection measures will be determined on a site-specific basis. Reiterates existing law (NEPA), regulation, and policy (see appendix F).

Special Use Management: Maintenance and Cooperation With User Groups

1986 Plan Content

Maintain existing electronic and astrophysical sites and complete site management plans for all sites with cooperation of user groups. Continue to establish user groups or organizations for each site. Consolidation of existing and new facilities and uses shall be given high priority over opening new sites. Group uses according to compatibility. (page 41)

Revised Forest Plan Direction

FW MAs for Special Uses (page 86):

- Maintaining existing communications sites and completing site management plans for all sites with the cooperation of communication site user groups.
- Continuing to establish user groups or organizations for each site.

FW DC for Special Uses: Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use. (page 84)

FW ST for Special Uses: Major utility corridor development is confined to the area identified and mapped in the 2008 “West-wide Energy Corridor Programmatic EIS.” (page 85)

DCs for the Pinaleño Ecosystem Management Area (page 155):

- Trails in the Mount Graham Astrophysical and Biological Research Area are open to hikers and visitors who are provided with information about the cultural significance of the area and the ways to be respectful.
- The dark skies above the Pinaleño Ecosystem Management Area present conditions conducive to astronomical research.

MA for the Pinaleño Ecosystem Management Area: Working with the University of Arizona and western Apache tribes to mitigate or reduce the effects of the Mount Graham International Observatory on the traditional cultural property. (page 157)

Chapter 5 of the revised forest plan identifies suitability of select special uses and management activities in the Mount Graham Astrophysical and Biological Research Area.

Rationale for Change(s)

Revised as MAs and FW direction for special uses. Specific direction provided for the Mount Graham Astrophysical and Biological Research Area. Project decisions and protection measures, volunteer and cooperation needs, and priorities will be determined on a site-specific basis.

Designated in 1989 by the Arizona-Idaho Conservation Act, the Mount Graham Astrophysical and Biological Research Area (2,937 acres) is a designated special management area. The University of Arizona manages the Mount Graham International Observatory.

Special Use Management: Mount Graham Electronic Site

1986 Plan Content

9. Within the Pinaleño Mountains, High Peak (Mt. Graham) will no longer be considered for electronic site development. Any development of the West Peak electronic site will be deferred until further analysis is completed as part of the recovery for the Mt. Graham red squirrel. (page 41)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW DC for Special Uses: Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use. (page 84)

Rationale for Change(s)

Addressed by FW direction for federally listed species and special uses. Chapter 3 of the FEIS describes the current status of Mount Graham red squirrel populations in the Mount Graham area.

Special Use Management: Communication Sites

1986 Plan Content

(page 41)

10. Electronic sites will be managed to the following standards:

(a) Maximize joint use of existing buildings.

(b) Lot plans as presently established will be eliminated. Sites allocated on a total required facility basis.

(c) Maintenance of individual site roads and trails will be carried out jointly through cooperative maintenance proportionate payments to the amount of use or will be maintained by the users.

(d) Clearing of vegetation will be limited to that which poses a hazard to facilities and operational efficiency.

(e) Commercial broadcasting and constant carriers will be allowed where compatible. These sites must be separated physically from land mobile and microwave sites.

(f) VHF transmitters will be permitted if frequencies are compatible with those of previous users. (Authorize only specified frequencies and not wide-range bands on 2700-10 Technical Data Sheets).

(g) All new and replacement towers must be self-supporting.

(h) New and replacement antennas and towers will be below the height for which the FAA requires lights because of the interference with the fire lookout tower and aesthetics.

(i) All utility lines will be placed underground.

(j) Any prospective permittee desiring a site shall furnish detailed plans of buildings and antenna support structure to the District Ranger for approval. All towers will meet Electronic Industries Association standard RS-222-C, structural standards for steel antenna towers. These plans will show the relationship of the proposed building and antenna to other facilities in the area, along with manufacturer's specifications for equipment to be used.

(k) All buildings will be colored to blend with the background.

Revised Forest Plan Direction

FW ST for Special Uses: Communications sites will be managed to the following standards (page 85):

a. Maximize the colocation of new and existing buildings and structures.

b. Site use shall be allocated to users on a facility-need basis.

c. Maintenance of National Forest System roads and trails to access communication sites, above and beyond normal Forest Service maintenance, or use and maintenance of private roads, will be carried out by the facility owner or association only after obtaining the proper authorizing document (e.g., road use permit).

d. Clearing of vegetation will be limited to that which poses a hazard to facilities and operational efficiency (see the communication site plan for further direction).

e. High- and low-power communication uses will be authorized only where designated as such in the communications site plans. Any potential electromagnetic interference must be resolved by the site users before construction can proceed. Senior uses on a site have priority over new or proposed uses. Microwave corridors will be protected from electromagnetic interference.

f. All new and replacement towers must be self-supporting.

g. New and replacement antennas and towers will be below the height for which the Federal Aviation Administration requires lights because of the interference with the fire lookout tower and aesthetics.

h. All utility lines connecting to communications sites will be buried underground.

i. All buildings and towers will meet color requirements set forth in the Coronado National Forest's "Architectural Guidelines for Recreation Residences." Microwave dishes will use dark grey/brown covers. Other antennas will be dark grey/brown, when available through the manufacturer. (page 83-84)

Rationale for Change(s)

Revised FW direction consistent with current law, regulation, policy, and guidance (see appendix F).

Lands Administration: Various

1986 Plan Content

(page 42)

1. Take actions necessary to determine status of NFS lands and interests in lands.

2. Update and maintain land status records.

3. Acquire lands or interest in lands through exchange, purchase, or donation in accordance with the Forest Land Adjustment Classification Maps and criteria set forth in table 11.

Revised Forest Plan Direction

FW DCs for Land Ownership Adjustments and Boundary Management:

- The land ownership pattern within the boundaries of the Coronado National Forest is characterized by large contiguous blocks of National Forest System land. Complex and fragmented land ownership patterns have been consolidated through collaborative land adjustments with non-Federal landowners or agencies (State, county, private, and other ownerships). (page 92)
- Existing National Forest System unit boundaries have been modified to provide national forest status to lands acquired, or lands to be acquired from non-Federal (state, county, private, and other ownerships) landowners, located outside unit boundaries, to provide logical exterior unit boundaries, and facilitate current and future management and administration of the Coronado National Forest. (page 93)

FW GDs for Land Ownership Adjustments and Boundary Management:

- Land exchanges should result in an improved land ownership pattern, more effective management of National Forest System lands, and foster sound community development. (page 93)
- The non-Federal lands considered for exchange into Federal ownership should meet one or more of the following criteria: Lands that provide needed public and administrative access, protect public lands from fire or trespass, or prevent damage to Coronado resources; lands

that will improve public land management, meet specific administrative needs, or benefit other national forest programs; lands that meet programs prescribed or endorsed by acts or reports of Congress or the Department of Agriculture. (page 93)

- Federal lands offered by the United States in a proposed land exchange should meet one or more of the following criteria: Lands that provide improved public land management; lands that will improve management, benefit specific resources, or increase management efficiency. (pages 93 and 94)

FW MAs for Land Ownership Adjustments and Boundary Management:

Land Ownership Adjustments (pages 94 and 95)

- Consolidating the National Forest System land ownership pattern through exchange, purchase, or donation, and other land ownership adjustment authorities.
- Acquiring non-Federal lands or interest in lands from non-Federal land owners (state, county, private, and others ownerships) that resolve public access issues, contain vital threatened and endangered species habitat or vital wildlife habitat, are water oriented and/or provide additional public recreational opportunities.

Land Exchanges (page 95)

- Considering opportunities to consolidate small private land inholdings into economically viable units.
- Evaluating the Federal lands to determine the merits of exchanging them into non-Federal ownership. (page 85)

Rationale for Change(s)

Revised as more explicit direction. Decisions related to land administration are subject to existing law (NEPA, FLPMA, etc.), regulation, and policy (see appendix F).

Lands Administration: Adjustments

1986 Plan Content

(page 42)

4. Make the following changes in the Forest Land Adjustment Program:

(a) **East Whitetail Canyon** (Chiricahua Mountains)

- Reclassify approximately 183 acres of National Forest land as base-for-exchange.
- Reclassify approximately 464 acres of private land from priority 3 for acquisition to undesirable for National Forest purposes.

(b) **Holy Cross Area** (Santa Catalina Mountains)

- Reclassify approximately 340 acres of National Forest land as base-for-exchange

(c) **Summerhaven Area** (Santa Catalina Mountains)

- Reclassify approximately 41 acres of private land from priority 1 to priority 3 for acquisition.

(d) **North and East Side of Santa Rita Mountains**

- Reclassify approximately 2500 acres of National Forest land as base-for-exchange

Revised Forest Plan Direction

None.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Project-level decisions subject to FW direction (see above) for Land Ownership Adjustments and Boundary Management, and existing law, regulation, and policy (see appendix F).

Lands Administration: Consolidation

1986 Plan Content

5. Exchanges should result in an improved Forest land ownership pattern. (page 42)

Revised Forest Plan Direction

FW GD for Land Ownership Adjustments and Boundary Management: Land exchanges should result in an improved land ownership pattern, more effective management of National Forest System lands, and foster sound community development. (page 93)

Other relevant direction is listed above.

Rationale for Change(s)

Guideline carried forward.

Lands Administration: Land Exchanges and Local Government

1986 Plan Content

6. The exchange of National lands into private ownership should not conflict with county zoning or State and local planning goals. (page 43)

Revised Forest Plan Direction

FW DC for Land Ownership Adjustments and Boundary Management: The land ownership pattern within the boundaries of the Coronado National Forest is characterized by large contiguous blocks of National Forest System land. Complex and fragmented land ownership patterns have been consolidated through collaborative land adjustments with non-Federal landowners or agencies (State, county, private, and other ownerships). (page 92)

FW GD for Land Ownership Adjustments and Boundary Management: Land exchanges should result in an improved land ownership pattern, more effective management of National Forest System lands, and foster sound community development. (page 93)

Rationale for Change(s)

DC and GD provides a more explicit direction for criteria to consider for boundary management. Decisions related to land administration are subject to existing law (NEPA, FLPMA, etc.), regulation, and policy (see appendix F).

Lands Administration: Land Exchange Criteria

1986 Plan Content

(page 43)

7. National Forest land exchanges should foster sound community development. Before exchanges are consummated, it should be determined that the lands being conveyed to private ownership are suitable for their intended use from the standpoint of soils, availability of water, drainage, access, and other physical and environmental factors.

8. Some areas of high management and operating costs, such as residence areas, do not contribute proportionately to achieving Forest Service goals and objectives. These areas should be carefully evaluated to determine the merits of exchanges. Areas that are costly to administer, have long-term land occupancy commitments, do not contribute significantly to achieving Forest Service goals and objectives, and have minimal benefit to the general public should be considered as candidate areas for exchange in return for areas of high value multiple resource lands.

9. Emphasize acquisition of water-oriented property inside the National Forest boundary. This property provides much needed high quality public recreation use, as well as high value wildlife and fish habitat.

10. Attempt to acquire private land from willing sellers that will provide additional public recreational opportunities including open space. Acquisition will receive low priority Forestwide.

Revised Forest Plan Direction

FW GD for Land Ownership Adjustments and Boundary Management: Land exchanges should result in an improved land ownership pattern, more effective management of National Forest System lands, and foster sound community development. (page 93)

FW GDs for Land Ownership Adjustments and Boundary Management (Land Exchanges) (page 93):

3. The non-Federal lands considered for exchange into Federal ownership should meet one or more of the following criteria:

a. Lands that provide needed public and administrative access, protect public lands from fire or trespass, or prevent damage to Coronado resources.

b. Lands that contain vital threatened and endangered species habitat or vital wildlife habitat.

c. Lands providing services to the public (e.g., developed and dispersed recreation, open space).

d. Wetlands, riparian areas, and other water-oriented lands.

e. Lands that contain unique, natural, or cultural values.

f. Lands within designated wilderness.

g. Lands that will improve public land management, meet specific administrative needs, or benefit other national forest programs.

h. Lands that meet programs prescribed or endorsed by acts or reports of Congress or the Department of Agriculture.

4. Federal lands offered by the United States in a proposed land exchange should meet one or more of the following criteria:

a. Lands needed to meet the needs of communities and the public.

b. Lands that provide improved public land management.

c. Lands that will improve management, benefit specific resources, or increase management efficiency.

d. Lands that have lost their wildland characteristics.

e. Lands with long-term land occupancy commitments, high management and operating costs, do not contribute significantly to achieving management objectives, have minimal benefit to the public, and would not create an isolated non-Federal parcel surrounded by National Forest System lands such as, but not limited to, recreation residence areas and administrative sites.

Rationale for Change(s)

Guideline carried forward with explicit direction for criteria to consider for land exchanges. Decisions related to land administration are subject to existing law (NEPA, FLPMA, etc.), regulation, and policy (see appendix F).

Lands Administration: Withdrawals

1986 Plan Content

(page 43)

11. Review all existing Forest Service withdrawals for following:

- Recreation areas
- Administrative sites
- Revocations and all others

Revised Forest Plan Direction

None.

Rationale for Change(s)

Decisions for withdrawal would be made at the site-specific level, subject to existing law, regulation, and policy (see appendix F).

Lands Administration: Encroachment

1986 Plan Content

12. Inventory fixtures (fences, buildings, etc.) which intrude upon or occupy National Forest Service lands as cases come to light. Resolve cases, by priority, as time and funding permits. (page 43)

Revised Forest Plan Direction

FW GD for Land Ownership Adjustments and Boundary Management (Landline Location) (page 94):

1. Landline location surveys should be prioritized by the following criteria:

a. Where known litigation is pending, a title claim has been asserted, encroachments are suspected, or the probability of encroachment can be reduced.

b. Where significant resource values exist and use or manipulation of resources is planned (this includes the location, by survey, of right-of-way easements necessary for resource management).

c. All remaining property lines.

FW MAs for Land Ownership Adjustments and Boundary Management (Landline Location) (page 94):

- Minimizing future encroachment cases and resolving present encroachments should be considered a priority.
- Considering opportunities to resolve boundary issues permanently at a substantial cost savings by consolidating non-Federal (State trust, county, private, and other ownerships) and National Forest System lands through the land adjustment program. (page 92)

Rationale for Change(s)

Revised as more explicit FW direction.

Land Line Location: Boundary Posting and Environmental Issues

1986 Plan Content

(page 43)

1. Post legal boundaries between private and National Forest System lands on a priority basis to let the public know where National Forest land is located. Priorities will be selected with emphasis directed toward minimizing future encroachment cases and resolving present encroachments. The level of activity is estimated at 26 miles per year.

2. Property lines in environmentally sensitive areas must be visible to be effective. Excessive clearing and painting will be avoided.

Revised Forest Plan Direction

FW DC Land Ownership Adjustments and Boundary Management: Property lines between National Forest System and non-Federal lands (state, county, private, and other ownerships) and boundary lines of special areas, such as the National Wilderness Preservation System, are easily

identified and recognized by public land users, private landowners, and Forest Service personnel. (page 92)

FW GDs for Land Ownership Adjustments and Boundary Management (Landline Location) (page 94):

1. Landline location surveys should be prioritized by the following criteria:

    a. Where known litigation is pending, a title claim has been asserted, encroachments are suspected, or the probability of encroachment can be reduced.

    b. Where significant resource values exist and use or manipulation of resources is planned (this includes the location, by survey, of right-of-way easements necessary for resource management).

    c. All remaining property lines.

3. Painting and excessive clearing of property lines should be avoided.

FW MAs for Land Ownership Adjustments and Boundary Management (Landline Location) (page 94):

- Minimizing future encroachment cases and resolving present encroachments should be considered a priority.
- Considering opportunities to resolve boundary issues permanently at a substantial cost savings by consolidating non-Federal (State trust, county, private, and other ownerships) and National Forest System lands through the land adjustment program. (page 93)

Rationale for Change(s)

Revised as more explicit FW direction. Further direction provided by existing law, regulation, policy, and guidance (see appendix F).

Land Line Location: Survey Corner Protection

1986 Plan Content

3. On all vegetation and fuel control projects, searches will be made for all land survey corners and bearing trees. Original field notes will be used in these searches. (page 43)

Revised Forest Plan Direction

FW GD for Land Ownership Adjustments and Boundary Management (Landline Location): A Bureau of Land Management (BLM) resurvey should be requested where there has been an extensive loss or obliteration of original corner monuments and/or where the potential for future litigation regarding the property boundaries between the national forest and private lands are high. (page 94)

Rationale for Change(s)

Direction provided by existing policy and guidance. Project-level decisions and design criteria including protection measures will be determined on a site-specific basis.

Land Line Location: Fence Construction

1986 Plan Content

4. All fences to be constructed along Forest boundaries will be staked by a land line survey crew. (page 43)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Direction provided by existing policy and guidance. Project-level decisions and design criteria will be determined on a site-specific basis.

Rights-of-Way Acquisition: Stakeholder Cooperation

1986 Plan Content

(page 44)

1. Work closely with the State, counties, and other Federal agencies to resolve rights-of-way problems. Insure public access to the various parts of the Forest on State, county, or permanent Forest Service roads.

2. Obtain necessary public access for all permanent roads and trails within the National Forest boundary.

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management (Landline Location): Acting on cooperative and joint land surveying opportunities with adjoining non-Federal land owners (State trust, county, private, and other ownerships). (page 94)

FW MA for Land Ownership Adjustments and Boundary Management (Rights-of-way): Ensuring administrative and public access to National Forest System lands by acquiring road and trail rights-of-way needed to meet public access objectives using various acquisition methods. Priority for road and trail rights-of-way acquisitions should be as follows: 1) Public access to National Forest System lands; 2) Administrative access to National Forest System lands. (page 95)

Rationale for Change(s)

Direction carried forward as FW direction.

Rights-of-Way Acquisition: Priorities Schedule

1986 Plan Content

3. Attempt to secure rights-of-way needs as shown by schedules included in table 7. (page 44)

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management (Rights-of-way): Ensuring administrative and public access to National Forest System lands by acquiring road and trail rights-of-way needed to meet public access objectives using various acquisition methods. Priority for road and trail rights-of-way acquisitions should be as follows: 1) Public access to National Forest System lands; 2) Administrative access to National Forest System lands. (page 95)

Rationale for Change(s)

Subject schedule (table 7 in the 1986 forest plan) not carried forward, overly prescriptive at the forest plan level. Revised as FW direction for prioritization and project- and site-specific needs will be determined as necessary.

Rights-of-Way Acquisition: Fence Gates

1986 Plan Content

4. Interior and boundary fences will have horse or hiker gates located at appropriate places such as trails, major drainages, and major ridgelines. (page 44)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Direction provided by existing policy and guidance. Project-level decisions and design criteria will be determined on a site-specific basis.

Transportation System Planning: Recreation

1986 Plan Content

1. Recognize pleasure driving as an important aspect of transportation system planning by coordinating circulation systems with the recreation opportunity spectrum. (page 44)

Revised Forest Plan Direction

FW DC for Recreation: Dispersed recreation activities on the Coronado National Forest include hiking, viewing natural features and wildlife, relaxing, driving for pleasure, nature study, picnicking, camping, off-highway vehicle riding, fishing, and hunting, among others. (page 78)

FW DCs for Motorized Transportation System (page 75):

- Road surfaces are primarily rough or primitive, but most are available for use by the more experienced traveler with a high ground-clearance vehicle. These roads provide opportunities in appropriate places for safe, responsible motorized recreation and provide varying back-country touring experiences for a variety of vehicle classes.
- Long distance loop routes provide opportunities for extended day trips with varying levels of challenge.

- Where appropriate, motorized trails provide a distinct back-country touring experience for motorcycles, all-terrain vehicles, and utility-terrain vehicles and minimize conflicts with other visitors.

FW MA for Motorized Transportation System: Evaluating travel routes (authorized, unauthorized, or closed) to designate motorized trails that provide a distinct back-country touring experience for motorcycles, all-terrain vehicles, and utility-terrain vehicles where compatible with other resource objectives. (page 76)

Rationale for Change(s)

Revised as FW direction, with explicit direction for recreation opportunity spectrums within LUZs.

Transportation System Planning: Resource Protection

1986 Plan Content

2. Develop the minimum transportation system to adequately meet management, protection, and utilization needs, but in locations that will minimize damage and maximize the values of all resources. (page 44)

Revised Forest Plan Direction

FW DCs for Motorized Transportation System:

- The Coronado National Forest has a designated system of routes open for motor vehicle use by the public. The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. (page 74)
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 75)

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Rationale for Change(s)

Revised as FW direction. More explicit direction provided for specific resource concerns.

Transportation System Planning: New Roads and Trails

1986 Plan Content

3. New roads or trails needed for resource development and management will be designed and constructed to standards identified in the transportation planning for the concerned area.

Revised Forest Plan Direction

None.

Rationale for Change(s)

Direction provided by existing decisions, regulations, and policy. The motorized transportation system defines designated roads, trails, and areas. Motor vehicle use maps are reviewed and updated as needed on an annual basis.

Transportation System Planning: Road Maintenance

1986 Plan Content

4. Road maintenance activities will be conducted primarily for protection of our road investment, resource protection, user safety, and user economy. Funding will continue to be the primary constraint on the intensity of road maintenance efforts. When roads in need of maintenance cannot be serviced because of budget constraints, they will be closed if unacceptable resource damage is occurring. Maintenance agreements with local government and private organizations will be sought to supplement Forest Service funding. (page 44)

Revised Forest Plan Direction

FW DCs for Motorized Transportation System:

- The Coronado National Forest has a designated system of routes open for motor vehicle use by the public. The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. (page 74)
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 75)

FW OBJs for Motorized Transportation System (page 75):

- Complete maintenance on at least 150 miles of high-clearance (maintenance level 2) roads annually.
- Complete maintenance on at least 200 miles of passenger car (maintenance levels 3, 4, and 5) roads annually throughout the plan period, based on a safety prioritization.
- Decommission, close, and restore 3 to 10 miles of unneeded nonsystem roads annually throughout the plan period, except for roads identified for potential public access routes.
- Install at least one hardened road surface each year at drainage crossings where erosion, sedimentation, or risks to water quality from road-stream crossings are affecting wildlife habitat in order to prevent downstream effects.
- Realign or remove 2 miles of roads in wetlands or meadows within 10 years of plan implementation.

FW MAs for Motorized Transportation System (page 76):

- Seeking easements and road maintenance agreements with local government agencies and private organizations to supplement Forest Service funded maintenance.
- Conducting road maintenance activities with the priorities of maintaining public access, protecting the road investment, protecting other resources, user safety, and user economy.
- Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas.

- Following existing memorandums of understanding, agreements, and guidelines with public road agencies and cooperators regarding operation and maintenance in easements on National Forest System land.

Rationale for Change(s)

Most 1986 plan direction carried forward as FW direction for the motorized transportation system.

Transportation System Planning: Swift Trail

1986 Plan Content

5. Snowplowing will be provided by the Mt. Graham International Observatory permittee to keep Swift Trail (State Highway 366) and the new access road open for limited access such as in level 2 road maintenance. Generally, access will not be suited for passenger vehicles. Tire chains and/or four-wheel drive would be required above the snow line. (page 44)

Revised Forest Plan Direction

DC for Pinaleño EMA: The Swift Trail Parkway, a State designated scenic byway, provides vehicular access to the ecosystem management area's primary recreational opportunities year round and access to high elevations from spring to fall. (page 155)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by FW DC and the existing Swift Trail Parkway Corridor Management Plan (see appendix F).

Transportation System Planning: Trail Maintenance

1986 Plan Content

(page 44)

6. Criteria for determining the appropriate level of trail maintenance are:

(a) Type and use (e.g. foot, horses, vehicles, or mix)

(b) Amount of use.

(c) Significance of trail (e.g. major access route, leads to dead-end, etc.)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 78)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

DC for Trails and Signage in Wilderness: Heavily used trails are well marked and maintained, while more remote trails offer a more primitive experience. (page 108)

FW DCs for Motorized Transportation System (pages 74 and 75):

- All roads including access roads to wilderness trailheads or wild back-country trails and routes are maintained for safe travel by trail users.
- There is an ongoing road maintenance program to prevent damage to resources from roads and to support safe travel by the public in a variety of vehicle types.

FW MA for Motorized Transportation System: Conducting road maintenance activities with the priorities of maintaining public access, protecting the road investment, protecting other resources, user safety, and user economy. (page 76)

Rationale for Change(s)

Revised as broader FW and management unit direction. Primary direction provided by existing law, regulation, and policy (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

Road and Trail Construction and Reconstruction: Prioritization of Roads

1986 Plan Content

1. Reconstruct major roads based on schedule shown in table 9 [p. 139 in the 1986 plan]. (page 44)

Revised Forest Plan Direction

FW OBJs for Motorized Transportation System (page 75):

- Complete maintenance on at least 150 miles of high-clearance (maintenance level 2) roads annually.
- Complete maintenance on at least 200 miles of passenger car (maintenance levels 3, 4, and 5) roads annually throughout the plan period, based on a safety prioritization.
- Decommission, close, and restore 3 to 10 miles of unneeded nonsystem roads annually throughout the plan period, except for roads identified for potential public access routes.

FW MA for Motorized Transportation System: Conducting road maintenance activities with the priorities of maintaining public access, protecting the road investment, protecting other resources, user safety, and user economy. (page 76)

FW DCs for Motorized Transportation System:

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate. (page 74)
- There is an ongoing road maintenance program to prevent damage to resources from roads and to support safe travel by the public in a variety of vehicle types. (page 75)
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion. (page 75)

Rationale for Change(s)

Overly prescriptive at the forest plan level, direction revised as FW OBJs. The FW MA outlines prioritization of road maintenance activities to meet FW DCs. Road construction and reconstruction priorities will be determined at the project level, consistent with existing law, regulation, and policy (see appendix F).

Road and Trail Construction and Reconstruction: General Hitchcock Highway

1986 Plan Content

2. Bring the General Hitchcock Highway to standard, two lane and 30 mph design speed, to improve safety and reduce maintenance costs. Keep the highway as a scenic highway. Maintain to level 5. Pima County will assume management responsibility once reconstruction is completed. Ensure that reconstruction has minimum impact on unique rock formations, riparian areas, threatened and endangered plants, etc. (page 44)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Outdated direction. Under the Forest Highway Program, the General Hitchcock Highway, or Catalina Highway, is currently owned, operated, and maintained by Pima County. It was designated a scenic route by Pima County, the "Sky Island Scenic Byway" by the Chief of the Forest Service in 1995, and "Sky Island Parkway" by the Federal Highway Administration (USDOT) in 2001.

Road and Trail Construction and Reconstruction: Prioritization of Trails

1986 Plan Content

3. Construct or reconstruct trails based on needs shown in table 10 [pp. 139-140 in the 1986 plan]. (page 44)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

MA for Trails and Signage in Wilderness: Prioritizing trail reconstruction based on potential for loss of wilderness values, impacts to wilderness recreation experience, access to wilderness, and amount of use. (page 108)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as FW direction. Trail construction and reconstruction priorities will be determined at the project level consistent with existing law, regulation, and policy (see appendix F).

Facility Construction

1986 Plan Content

1. Construct or reconstruct facilities in accordance with schedule in table 6 [p. 137 of the 1986 plan]. (page 45)

Revised Forest Plan Direction

See FW direction for facility maintenance (next page).

Rationale for Change(s)

Overly prescriptive at the forest plan level. (table 6 of the 1986 plan lists specific administrative facility needs of the Coronado National Forest.) In the revised plan, the term "facility" has a much broader meaning than that considered in the 1986 plan. Construction and reconstruction of facilities would be determined as needed, subject to existing law, regulation, and policy (see appendix F).

Facility Maintenance

1986 Plan Content

1. Maintain facilities to the appropriate condition class. See appendix F [p. 123 of the 1986 forest plan] for definition of building condition classes. (page 45)

Revised Forest Plan Direction

FW MAs for Recreation (page 79):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.

FW GDs for Scenery (pages 82 and 83):

- Facilities should be designed to complement the landscape by siting them to reduce scenic impacts, using dark, neutral colors, and repeating the line, form, texture, pattern, and scale of the landscape to blend structures into their surroundings. This applies to public recreation sites, administrative sites, facilities owned by other government agencies (except for Department of Homeland Security), and permitted structures.
- Facilities associated with locatable mining activities should blend with the natural background.
- Department of Homeland Security should attempt to use mitigation measures at their facilities to minimize impacts to scenic quality.
- New facilities added to communication sites, astrophysical complexes, and administrative sites should be clustered within existing areas. Facility colors and materials should blend with the landscape, structures should generally be below the height of vegetation, and vegetation that screens views to facilities should be protected and encouraged unless doing so would not achieve project goals.

FW DCs for Scenery (pages 81 and 82):

- Structures and facilities required for serving public use of scenic and recreation resources include roads, campgrounds, trails, visitor centers, and observation points.
- To be functional, these facilities are normally visible in immediate foregrounds, but they harmonize with the natural setting. Widely scattered, minor deviations in the landscape character are occasionally seen, such as distribution and telephone lines and range improvement facilities.
- In the rare instances where visitors see larger utilitarian structures (such as communications towers, transmission lines, astrophysical facilities, and administrative sites), these elements blend into the landscape well because their design and siting follows the line, form, color, texture, and pattern common in the desired landscape character.
- Along scenic byways and other popular travel routes, visitors find occasional developed recreation sites that provide desired amenities (restrooms, picnic tables, and so forth), but these facilities are in character with the National Forest System setting.
- Occasionally, visitors see unique historic sites; these areas are positive scenic elements, providing a glimpse of times past.
- Private cabins appear rustic and blend with the landscape.
- New facilities are rare, and they blend well into the landscape. (page 80)

FW GDs for Special Uses (pages 85 and 86):

- Facilities should be sited and designed to blend into the landscape as much as possible. Whenever possible, heights of structures should be kept below the height of surrounding vegetation, and vegetation that screens views to utilitarian facilities should be protected and encouraged.
- Phone and power distribution lines that cross National Forest System lands to access private inholdings or Forest Service facilities should be located and designed so as to be screened by topography or vegetation as much as possible.

FW MA for Cultural Resources: Historic values should be considered in the development and modification of facilities. (page 87)

DC for Developed Recreation LUZ: Facilities are in good condition and blend into the national forest setting. (page 101)

Rationale for Change(s)

Revised as FW direction for various resources and management units. In the revised plan, the term "facility" has a much broader meaning than that considered in the 1986 plan. Facility maintenance would occur consistent with existing law, regulation, and policy (see appendix F).

Dam Administration

1986 Plan Content

1. Inspect dams as per current FSM direction

Revised Forest Plan Direction

None.

Rationale for Change(s)

Unclear whether this is a ST or GD. Reiterates existing direction.

General Administration: Public Involvement

1986 Plan Content

1. Every attempt will be made to make the public aware of Forest Service management activities. Emphasis shall be placed on those practices that exclude public use, such as electronic or astrophysical sites, and those practices not generally understood by the public. (page 45)

Revised Forest Plan Direction

None.

Rationale for Change(s)

Unclear whether this is a ST or GD. Reiterates existing law (NEPA), regulation, and policy (see appendix F).

Fire Management: Efficiency

1986 Plan Content

1. Develop the most cost-efficient operations for fire management activities depending on the resources, property, and lives to be protected. (page 45)

Revised Forest Plan Direction

FW ST for Vegetation Communities: Public and firefighter safety will be the highest priority during all fire management activities. (page 22)

FW DCs for Wildland-Urban Interface (page 23):

- As a result of vegetation management, most wildfires in the wildland-urban interface are low- to mixed-severity fires that result in limited loss of structures or ecosystem function.
- Wildland-urban interface residents and visitors are knowledgeable about wildfire protection measures for their homes and property, including defensible space.
- People using wildland-urban interface areas are educated about the potential danger of wildlife, particularly black bears and mountain lions, and measures they can take to prevent encounters.
- Access to wildland-urban interface areas allows for increased safety and efficiency of wildfire suppression operations.

FW MAs for Wildland-Urban Interface (page 23):

- Supporting the development and implementation of community wildfire protection plans.
- Encouraging landscape-scale planning for wildland fire management across jurisdictional boundaries.
- Educating property owners on the need to take primary responsibility for maintaining a defensible space around their property.

Rationale for Change(s)

Revised as FW direction. Primary direction for fire management provided by existing law, regulation, and policy (see appendix F).

Fire Management: Hazards

1986 Plan Content

2. Keep the level of prevention and pre-suppression activities commensurate with the increasing risks and hazards. (page 45)

Revised Forest Plan Direction

FW ST for Vegetation Communities: Public and firefighter safety will be the highest priority during all fire management activities. (page 22)

DCs for Fire in Wilderness (page 106):

- Fires within an acceptable level of risk span into and across delineated wilderness boundaries.
- Fires rarely require physical human intervention, except in the wildland-urban interface.
- Wildfires do not threaten the natural characteristics of an area, nor do they threaten other resources, structures, or values at risk adjacent to wilderness areas.

Rationale for Change(s)

Revised as FW direction with explicit direction for fire in wilderness. Primary direction for fire management provided by existing law, regulation, and policy (see appendix F).

Fire Management: Resource Protection

1986 Plan Content

3. Conduct fire suppression activities in a way to protect watershed and visual resource values. (page 45)

Revised Forest Plan Direction

FW DCs for Watersheds (page 57):

- Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly.
- Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes.

FW GDs for Natural Water Sources (page 60):

- Projects in upland habitats adjacent to streams should be designed to minimize input of sediment to streams.
- Water quality, quantity, and aquatic habitat at natural springs and seeps should be protected or enhanced.
- Fuel buildup should be reduced around natural water sources to protect them from uncharacteristic fire effects.
- Management activities should not impair soil moisture recharge at outflows of natural water sources. (page 58)

FW DCs for Scenery (pages 81 and 82):

- Disturbances, including insect and disease outbreaks and wildfire, occur within their natural scale and do not diminish large viewsheds or major portions of any ecosystem management area.
- Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less).

- Treatment boundaries are naturally shaped and blend with existing vegetation patterns and landscape character and encourage vegetation that screens unsightly elements (such as administrative buildings, communication sites, and mines) from sensitive viewing areas such as campgrounds and trails.

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

FW GD for Air: Class I and class II airsheds should be considered when determining the response to wildland fires. (page 64)

FW MA for Air: Managing and coordinating the timing, duration, and frequency of planned ignitions throughout the Coronado to minimize regional impacts to air quality. (page 64)

Rationale for Change(s)

Revised as FW direction. Primary direction for fire management provided by existing law, regulation, and policy (see appendix F).

Fire Management: Life and Property

1986 Plan Content

4. Appropriate fire suppression responses will protect life and property. (page 45)

Revised Forest Plan Direction

FW ST for Vegetation Communities: Public and firefighter safety will be the highest priority during all fire management activities. (page 22)

Rationale for Change(s)

Revised as FW direction. Primary direction for fire management provided by existing law, regulation, and policy (see appendix F).

Air Quality Management: Standards

1986 Plan Content

1. All management practices will be planned so that air quality will meet local, State, and Federal standards. (page 45)

Revised Forest Plan Direction

FW DC for Air: Air quality above the Coronado National Forest meets Federal and State air quality standards, including standards for visibility and health hazards from pollutants. (page 64)

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law (Clean Air Act), regulation, and policy (see appendix F).

Chemical Management: Pesticides and Fire Retardant

1986 Plan Content

(page 46)

1. Safeguard water, people, animals, pets, and property in connection with the use of pesticides and fire retardants.

2. Conform to Department of Agriculture standards in the use of all pesticides and promote development of acceptable alternatives for the use of pesticides.

3. Chemicals may be used within guidelines approved by other agencies for the following purposes:

(a) Insecticides and rodenticides in recreation areas and administrative sites.

(b) Herbicides for aquatic weed control in fishing lakes. Requests normally come from State Game and Fish Departments.

(c) Insect and disease control on timber and rangelands. Proposals for insect control on rangelands (i.e. grasshoppers, etc.) normally come from outside agencies.

(d) Small research studies from universities or governmental research agencies.

(e) Herbicides to control brush and herbaceous plants along State and Federal highways. Requests normally come from State Highway Departments as par of annual highway maintenance.

(f) Dust control at recreation sites and administrative sites and on roads.

(g) Cyanide leaching as part of mining operations.

(h) Herbicides to control invading plants that reduce herbaceous forage production on rangelands. Not all of the control would be done by use of herbicides. Depending on individual circumstances, the control might be by mechanical means, prescribed fire, fuelwood harvest, herbicides, or some combination.

Revised Forest Plan Direction

FW MA for Invasive Species: Following the “Forest Service Guide to Noxious Weed Prevention Practices.” (page 69)

Rationale for Change(s)

Primary direction for invasive species and fire management provided by existing law, regulation, and policy (see appendix F). Project decisions and design features will be determined on a site-specific basis. The “Forest Service Guide to Noxious Weed Prevention Practices” describes practices for preventing weed infestations during fire management activities, timber harvest, grazing management, mineral development, recreation, road maintenance, and special use projects. These practices include equipment cleaning, using weed-free hay, seed mixes, and fill materials, and requiring these practices in contracts and special use permits.

Insect and Disease Management: Threatened and Endangered Species and Invasive Species

1986 Plan Content

1. Threatened, endangered, and sensitive species habitat requirements will take precedence over vegetation manipulation to control insects and disease. All silvicultural examinations will integrate insect and disease considerations in the final stand prescriptions to maintain stand vigor and composition in resistant conditions. Special attention will be given to removal of mistletoe-infected trees during intermediate harvests and regeneration harvests. (page 46)

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW GD for Vegetation Communities: Even-aged silvicultural practices may be used as a strategy for achieving the desired conditions over the long term, such as bringing mistletoe infection levels to within a sustainable range. (page 22)

FW MA for Vegetation Communities: Prioritizing existing invasive plant, insect, and pathogen species for eradication, containment, or control. Developing resistance in host species when eradication, containment, or control is not possible. (page 22)

FW DC for Invasive Species: Infestations of invasive exotic plants do not contribute to the loss of native species or impairment of ecosystem function. (page 69)

FW MAs for Invasive Species (page 69):

- Detecting and treating new populations of invasive species before they become established.
- Eradicating or managing invasive species with a coordinated approach using integrated pest management.
- Developing treatment plans and actions that are responsive to current guidance regarding public and ecosystem health, which contribute to the protection and recovery of federally listed and Forest Service sensitive wildlife and plant species.
- Following the “Forest Service Guide to Noxious Weed Prevention Practices.”
- Coordinating the integrated pest management approach with the plans and efforts of other Federal, State, and local agencies, nongovernmental organizations, volunteers, partners, and landowners.

Rationale for Change(s)

Related to T&E and sensitive species, addressed as FW direction. Other direction is provided by existing law, regulation, and policy (see appendix F). For federally listed species and regionally sensitive species, ESA has the highest authority. Therefore, protection of listed species would have precedence over sensitive species. More explicit direction (ST, GD, etc.) is provided by species in the revised forest plan.

Other FW direction addresses management of invasive plant, insect, and pathogen species. Primary direction for invasive species management provided by existing law, regulation, and policy (see appendix F).

Law Enforcement

1986 Plan Content

(page 46)

1. Increase and strengthen law enforcement efforts through Memoranda of Understanding and providing Forest Service law enforcement personnel.

2. Enforce laws firmly and fairly. Emphasize personal contact and education over issuance of citations.

3. In all programs, incorporate measures to promote safety.

Revised Forest Plan Direction

FW MA for Recreation: Working closely with the Department of Homeland Security and Border Patrol to manage recreation settings near the international border to ensure visitor safety and reduce associated impacts such as trail damage and litter especially in high use recreation areas such as Cave Creek, Madera Canyon, Pena Blanca Lake, Parker Canyon Lake, and Carr Canyon. (page 79)

MA for Tumacacori EMA: Coordinating with the Department of Homeland Security in the protection of archaeological sites during law enforcement activities. (page 144)

MAs for Miller Peak Wilderness (pages 112 and 113):

- Communicating with U.S. Border Patrol officers to maximize safety awareness when large groups are present and during the high visitor use season.
- Coordinating with the U.S. Border Patrol to ensure that agents are aware of wilderness policies and mindful of the wilderness characteristics unique to this area.

MAs for Pajarita Wilderness (pages 114 and 115):

- Coordinating with the U.S. Border Patrol to develop strategies that ensure illegal immigrants and traffickers are not funneled into the Pajarita Wilderness as enforcement activities ensue.
- Communicating with U.S. Border Patrol officers to maximize safety awareness when large groups are present and during the high visitor use season.
- Coordinating with the U.S. Border Patrol to ensure that agents are aware of wilderness policies and mindful of the wilderness characteristics unique to this area. Further, working to ensure that actions taken by the U.S. Border Patrol are guided by the Forest Service's intent to maintain or improve wilderness values.

Related to safety, direction provided by various resources and subject areas (e.g., fire management, forest products, biophysical features)

Rationale for Change(s)

Direction provided for specific areas of concern. Primary direction related to law enforcement provided by existing law, regulation, and policy (FSM 5340.2 Law Enforcement) (see appendix F). The Coronado National Forest also supports, through the special use permitting process, military, local law enforcement, and Department of Homeland Security activities.

Management Area 1

Visual Resources/ Semi-Primitive Dispersed Recreation. Management Area 1 provides direction for management of visual resources and semiprimitive dispersed recreation. Forest lands designated as Management Area 1 comprise 111,284 acres of steep, rugged terrain (7 percent of the national forest) that has slopes greater than 40 percent. Lands may be highly visible from primary motorized travel routes. All vegetation communities are represented in this management area except for major riparian. This management area is unsuitable for timber production and livestock grazing.

Management Emphasis and Intensity

1986 Plan Content

Manage for visual resources and semi-primitive dispersed recreation opportunities including those related to wildlife. Visual quality objectives will be met. (page 47)

Revised Forest Plan Direction

Management Area 1 is reclassified as predominantly wild backcountry and roaded backcountry LUZs, and recommended wilderness areas (Ku Chish and Whetstone). Key direction for these areas and resources is listed below.

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DCs for Wild Backcounty LUZ (page 99):

- The wild undeveloped character of these areas is preserved. Settings are natural, and the sights and sounds of motorized vehicles are infrequent along roads and nonexistent in unroaded areas.
- Opportunities for solitude and quiet recreation are readily found.
- Visitors are able to explore and discover remote portions of the Coronado via primitive back-country motorized routes.
- Quiet experiences are available in this entire zone, with the exception of areas directly adjacent to the small number of access roads.

GDs for Wild Backcountry LUZ (page 99):

- Recreation opportunity spectrum classes in this land use zone should be primitive, semiprimitive nonmotorized, and semiprimitive motorized except in areas where the recreation setting is influenced by motorized access in adjacent land use zones or by private inholdings.
- Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map. (page 97)

DCs for Roaded Backcountry LUZ:

- Recreation opportunity spectrum classes in this land use zone are semiprimitive nonmotorized, semiprimitive motorized, roaded modified, and roaded natural except where there are small, remote administrative sites, developed recreation sites, and permitted facilities. (page 100)

GDs for Roaded Backcountry LUZ (page 100):

- The level and type of development should be limited in order to protect the natural character inherent in this zone.
- Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map.

DC for Recommended Wilderness Areas and Wilderness Study Areas: Wilderness study areas and recommended wilderness are natural in appearance. They provide unconfined opportunities for exploration, solitude, natural risk, challenge, and primitive recreation. (page 119)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness areas should be managed to maintain and enhance their wilderness character, which includes scenic resources, primitive recreation settings and fish and wildlife habitats.
- Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources.
- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

Steep, rugged lands that may be very visible from major travel routes. These lands have generally been determined as incapable of or unsuitable for sustained wood harvest and livestock grazing. Slopes are generally greater than 40 percent. Includes all vegetative types except major riparian areas. (page 47)

Capability Area Types: 1M, 6M, and 7M

Total acres = 97,772

Revised Forest Plan Direction

As noted above, Management Area 1 is reclassified as predominantly wild backcountry, roaded backcountry, and recommended wilderness areas (Ku Chish and Whetstone). Roaded backcountry, wild backcountry, and recommended wilderness areas are generally suitable for livestock grazing (appendix E). Forestwide timber suitability is addressed below, with specific direction for wilderness areas as follows.

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Capability area framework not carried forward. As noted above, the 1986 management area framework was revised based on administrative and user needs and comments received during the planning process. Suitability determinations for livestock grazing are based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Management areas determined to be suitable for livestock grazing range in size from 762 acres to almost 650,000 acres, and all contain both capable and not-capable lands due to the complex topography of the Coronado.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable (page 47)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production. (page 170)

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis.

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Maintain 25 percent of trails to level 2 and 75 percent to level 3. See appendix E [p. 121 of the 1986 plan] for a definition of levels. (page 47)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

GD for Wild Backcountry LUZ: New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection. (page 99)

GD for Roaded Backcountry LUZ: The level and type of development should be limited in order to protect the natural character inherent in this zone. (page 100)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness areas should be managed to maintain their wilderness character which includes scenic resources, primitive recreation settings and fish and wildlife habitats.
- Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. (page 47)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically

authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Motorized access is generally suitable in wild backcountry (limited) and backcountry LUZs, but is generally not suitable in wilderness areas (see chapter 5, table 14).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

3. Emphasize semi-primitive motorized and semi-primitive nonmotorized recreation opportunities. When roads are no longer needed, close them in order to create more opportunities for semi-primitive nonmotorized or primitive experiences. (page 47)

Revised Forest Plan Direction

Management emphasis for these areas is described above.

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

MA for Wild Backcountry: Removing roads and temporary facilities when they are no longer needed. (page 100)

Rationale for Change(s)

As noted above, the 1986 management area framework was revised based on administrative and user needs and comments received during the planning process. Plan components are prescribed forestwide and in management areas to meet desired conditions.

1986 Plan Content

4. Manage dispersed use at a level of 100 percent reduced services. (page 47)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DC for Roaded Backcountry LUZ: Recreation opportunity spectrum classes in this land use zone are semiprimitive nonmotorized, semiprimitive motorized, roaded modified, and roaded natural except where there are small, remote administrative sites, developed recreation sites, and permitted facilities. (page 100)

GDs for Roaded Backcountry LUZ (page 100):

- The level and type of development should be limited in order to protect the natural character inherent in this zone.
- Managers should consider expanding the uses of existing facilities before proposing new facilities.
- New roads may be constructed, reconstructed, or relocated for a variety of public and administrative uses and needs.

GDs for Wild Backcountry LUZ (page 99):

- Recreation opportunity spectrum classes in this land use zone should be primitive, semiprimitive nonmotorized, and semiprimitive motorized except in areas where the recreation setting is influenced by motorized access in adjacent land use zones or by private inholdings.
- Temporary roads should be allowed only for administrative access, national security, tribal needs, forest health projects, or fires, except in inventoried roadless areas (IRAs).
- New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection. (page 97)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.
- New recreation facilities other than trails should not be constructed.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 47)

1. Manage the following acres at the indicated visual quality objectives:

- 12,710 acres Retention (13 percent)
- 51,819 acres Partial Retention (53 percent)
- 33,265 acres Modification (33 percent)
- 978 acres Maximum Modification (1 percent)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Wild Backcountry LUZ: Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map. (page 99)

GD for Roaded Backcountry LUZ: Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map. (page 100)

GD for Recommended Wilderness Areas and Wilderness Study Areas: Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources. (page 120)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Wildlife

1986 Plan Content

(page 47)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed plant and animal species and work toward delisting.

(2) Maintain current levels of occupied habitat for:

- mule deer
- white-tailed deer
- javelina
- bighorn sheep
- pronghorn
- cottontail
- white-sided jackrabbit
- black bear
- raptors
- Merriam's turkey
- Gould's turkey
- scaled quail
- Mearn's quail
- Gambel's quail
- waterfowl
- Baird's sparrow
- five-striped sparrow
- Arizona ridge-nosed rattlesnake
- twin-spotted rattlesnake
- western massassauga
- Gila topminnow

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction

for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Wildlife Habitat Maintenance

1986 Plan Content

(page 48)

1. Maintain wildlife structures based on guidelines shown in Forestwide prescription. The objective is to maintain current levels of occupied habitat for:

- mule deer
- white-tailed deer
- javelina
- bighorn sheep
- pronghorn
- cottontail
- black bear
- Merriam's turkey
- scaled quail
- waterfowl
- Gila topminnow

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance …" (p. 91).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- T&E, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 48)

Structural and nonstructural habitat improvement projects will be based on guidelines shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Improve quality and availability of forage and availability of water for commonly hunted species:

- mule deer
- white-tailed deer
- javelina
- bighorn sheep
- pronghorn

(2) Maintain horizontal and vertical plant diversity at current level.

(3) Delist threatened and endangered species and reoccupy historic habitat with other identified species following guidelines in approved species recovery plans and Memoranda of Understanding.

(4) Maintain and improve current nesting habitat for endangered species as directed by approved recovery plans.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

1. Manage rangeland at level A (no assigned permitted use for livestock). (page 48)

Revised Forest Plan Direction

Roaded backcountry, wild backcountry, and recommended wilderness areas are generally suitable for livestock grazing (appendix E).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Restore to satisfactory watershed condition, on an emergency basis, watersheds or portions of watersheds when damaged. Watershed treatment is a low priority in this Management Area. Water and soil resources improvements may consist of channel stabilization and revegetation using native or nonnative species. See appendix D for appropriate activities. (page 49)

Revised Forest Plan Direction

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

FW MA for Soil: Prioritizing watershed improvement projects based on implementing objectives for vegetation communities. (page 63)

FW OBJ for Soil: Every 10 years enhance or restore 2,500 to 15,000 acres of uplands with vegetation treatments or soil and watershed restoration treatments to attain necessary ground cover by litter and ground cover by plant basal area. (page 63)

FW Landscape Scale DC for Natural Water Sources: Water quality, stream channel stability, and aquatic habitats retain their inherent resilience to natural and other disturbances, including climate variability and change. (page 52)

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Lands Administration

1986 Plan Content

(page 49)

1. Attempt to acquire private lands that will "fill-in" ownership pattern resulting in more effective management of National Forest lands.

2. Act on all exchange offers that appear to be in the public interest.

Revised Forest Plan Direction

See FW direction for “Land Classification: Ownership Adjustment” (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Road Maintenance

1986 Plan Content

1. Bring existing roads that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for minimum safety and resource protection. Maintain roads to level 2. See appendix F for a definition of levels. (page 49)

Revised Forest Plan Direction

See FW direction for "Transportation System Planning: Road Maintenance" (p. 122); and "Dispersed and Developed Recreation and Wilderness: Transportation" (p. 67).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

2. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element. (page 49)

Revised Forest Plan Direction

FW DCs for Motorized Transportation (pages 74 and 75):

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion.

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Also see FW direction for "Transportation System Planning: Road Maintenance" (p. 122)

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See chapter 5 and map for definition and location of zones. (page 49)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

2. Natural fuel treatment may consist of broadcast burning or wood gathering for fuelwood. (page 49)

Revised Forest Plan Direction

See FW direction for "Timber Management: Fuelwood and Other Products" (p. 95).

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.

Use of fuelwood products are generally suitable in wild backcountry and roaded backcountry, but generally not suitable in wilderness areas (revised plan, chapter 5).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats (e.g., Mexican spotted owl and northern goshawk) to protect or retain certain components (e.g., snags).

1986 Plan Content

(page 49)

3. Prescribed fire will be used to reduce fuel hazards, enhance wildlife values, and enhance visual resources.

4. All projects that include prescribed fire will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

FW DC for Animals and Rare Plants: Naturally occurring native ecosystems are present and sustainable across the Coronado National Forest, providing habitat to support a full complement of plants and animals. (page 65)

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 49)

1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damage from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable.

2. Recognize and prevent conditions favorable for insect and disease outbreaks.

Revised Forest Plan Direction

FW MAs for Vegetation Communities: Prioritizing existing invasive plant, insect, and pathogen species for eradication, containment, or control. Developing resistance in host species when eradication, containment, or control is not possible. (page 23)

FW DC for Invasive Species: Infestations of invasive exotic plants do not contribute to the loss of native species or impairment of ecosystem function. (page 69)

FW MAs for Invasive Species (page 69):

- Detecting and treating new populations of invasive species before they become established.
- Eradicating or managing invasive species with a coordinated approach using integrated pest management.
- Developing treatment plans and actions that are responsive to current guidance regarding public and ecosystem health, which contribute to the protection and recovery of federally listed and Forest Service sensitive wildlife and plant species.
- Following the “Forest Service Guide to Noxious Weed Prevention Practices”.
- Coordinating the integrated pest management approach with the plans and efforts of other Federal, State, and local agencies, nongovernmental organizations, volunteers, partners, and landowners.

FW GD for Vegetation Communities: Even-aged silvicultural practices may be used as a strategy for achieving the desired conditions over the long term, such as bringing mistletoe infection levels to within a sustainable range. (page 23)

Rationale for Change(s)

Redundant with FW direction. Primary direction for invasive species and fire management provided by existing law, regulation, and policy (see appendix F). Project decisions and design features will be determined on a site-specific basis. The “Forest Service Guide to Noxious Weed Prevention Practices” describes practices for preventing weed infestations during fire management activities, timber harvest, grazing management, mineral development, recreation, road maintenance, and special use projects. These practices include equipment cleaning, using weed-free hay, seed mixes, and fill materials, and requiring these practices in contracts and special use permits.

Management Area 2

Dispersed Recreation/ Timber Harvest. Management Area 2 provides direction related to management of dispersed recreation; special uses such as electronic communication sites and observatories; and sawtimber or fuelwood gathering, if these activities enhance recreation, visual quality, and wildlife values. Forest lands designated as Management Area 2 comprise 32,430 acres (2 percent of the national forest) of coniferous forest that has slopes less than 40 percent. These areas are located in the Chiricahua, Pinaleño, Santa Rita, and Santa Catalina Mountain ranges and are suitable for a wide variety of recreational and special uses. About 5,000 acres are suitable for timber production in the Chiricahua and Santa Catalina Mountains combined; all other acres in Management Area 2 are unsuitable for this use.

Management Emphasis and Intensity

1986 Plan Content

(page 50)

Manage for dispersed recreation opportunities.

Uses such as electronic sites and observatories will be permitted on special sites.

Sawtimber and fuelwood harvest will be done to enhance recreation, visual quality, and wildlife values.

Visual quality objectives will be met.

Watershed conditions will be maintained or improved.

Revised Forest Plan Direction

Management Area 2 is reclassified as predominantly wild backcountry, developed recreation, and roaded backcountry LUZs. Key direction for these areas and resources is listed below.

DCs for Wild Backcounty LUZ (page 99):

- The wild undeveloped character of these areas is preserved. Settings are natural, and the sights and sounds of motorized vehicles are infrequent along roads and nonexistent in unroaded areas.
- Opportunities for solitude and quiet recreation are readily found.
- Visitors are able to explore and discover remote portions of the Coronado via primitive back-country motorized routes.
- Quiet experiences are available in this entire zone, with the exception of areas directly adjacent to the small number of access roads.

GDs for Wild Backcountry LUZ (page 99):

- Recreation opportunity spectrum classes in this land use zone should be primitive, semiprimitive nonmotorized, and semiprimitive motorized except in areas where the recreation setting is influenced by motorized access in adjacent land use zones or by private inholdings.

- Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map.
- New utility structures and power lines should not be allowed.
- Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map.

DCs for Developed Recreation LUZ (page 101):

- Facilities are in good condition and blend into the forest setting.
- Visitors can enjoy natural settings with a high level of comfort and safety. Roads are well maintained and accommodate all types of vehicles.

GDs for Developed Recreation LUZ (page 101):

- Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting.
- Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment.

DCs for Roaded Backcountry LUZ:

- Recreation opportunity spectrum classes in this land use zone are semiprimitive nonmotorized, semiprimitive motorized, roaded modified, and roaded natural except where there are small, remote administrative sites, developed recreation sites, and permitted facilities. (page 100)

GDs for Roaded Backcountry LUZ (pages 100 and 101):

- The level and type of development should be limited in order to protect the natural character inherent in this zone.
- Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map.
- New utility structures and power lines should be located within existing communications sites and utility corridors except as needed to meet statuatory requirements, e.g., mining law or laws to protect public health and safety.

Regarding timber and fuelwood harvest, see FW direction for “Timber Management: Fuelwood and Other Products” (p. 95).

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and across management areas and vegetation communities to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

(page 50)

Coniferous forest lands that are suitable for a wide variety of recreational and special uses. Slopes generally less than 40 percent. Includes both suitable and unsuitable timber producing lands.

Located in the Chiricahua, Pinaleno, Santa Rita, and Santa Catalina Mountain Ranges.

Capability Area Types: 4M, 9ABM, 9BHM, 9CHM, and 9DBM

Total acres = 27,663

Revised Forest Plan Direction

As noted above, Management Area 2 is reclassified as predominantly wild backcountry, developed recreation, and roaded backcountry. Forestwide timber suitability is addressed below.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: Suitable for timber harvest = 5,000 acres (Chiricahua and Santa Catalina Mountains). All other acres unsuitable. (page 50)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production. (page 170)

Rationale for Change(s)

Decision not carried forward, based on an updated timber suitability analysis.

Standards and Guidelines-Dispersed Recreation

1986 Plan Content

1. Maintain trails to level 3. See appendix E for a definition of levels. (page 50)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80) :

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

GD for Wild Backcountry LUZ: New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection. (page 99)

GD for Developed Recreation LUZ: Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting. (page 101)

GD for Roaded Backcountry LUZ: The level and type of development should be limited in order to protect the natural character inherent in this zone. (page 100)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

(page 50)

2. Use of motorized vehicles is restricted to existing trails and roads. Some roads and trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles.

3. Road 507 will be closed to public motorized vehicles at the junction with Swift Trail. Nonmotorized activities will be permitted along the first 1.8 miles to the red squirrel refugium boundary.

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Motorized access is generally suitable in wild backcountry (limited), developed recreation, and roaded backcountry LUZs. Off-highway-vehicle-focused recreation is generally not suitable in any of these areas, however (see revised plan, chapter 5).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

Standards and Guidelines-Dispersed Recreation (snowmobiles)

1986 Plan Content

4. Within the Pinaleño Mountains, snowmobiles are restricted to roads and trails designated (signed) for their use. (page 50)

Revised Forest Plan Direction

None

Rationale for Change(s)

Decision not carried forward in the revised forest plan. Direction provided by existing regulation and policy, namely the Travel Management Rule (73 FR 74689). The Travel Management Rule does not require units to designate roads, trails, and areas for over-snow travel. The final rule retains current authorities to manage use of National Forest System lands by over-snow vehicles, which may be allowed, restricted or prohibited at the local level. Over-snow vehicles result in different impacts to natural resources than motor vehicles traveling over the ground. It may therefore be appropriate for snowmobiles and other over-snow vehicles to travel cross-country in some places where other vehicles are restricted to designated roads, trails, and areas. The final rule expands this exemption to include other over-snow vehicles in addition to snowmobiles.

Standards and Guidelines-Dispersed Recreation

1986 Plan Content

5. Facilities for snow play activity (tubing/sledding) could be developed outside suitable habitat for the Mt. Graham red squirrel. Consider as part of other recreational sites development in MA 3A/3B. (page 50)

Revised Forest Plan Direction

DC for the Pinaleño EMA: The Mount Graham Astronomical and Biological Research Area provides habitat for the Mount Graham red squirrel and astrophysical research at the Mount Graham International Observatory. Recreational uses or management activities do not degrade these special habitats. (page 156)

ST for the Pinaleño Ecosystem Management Area: Within habitat for the Mount Graham red squirrel, no new recreational residence or developed recreation areas will be established. (page 156)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Explicit direction provided for Mount Graham red squirrel habitat. FW direction provided for T&E species.

1986 Plan Content

6. Manage dispersed use at a level of 100 percent reduced service. (page 50)

7. Maintain at least the current amount of ROS Class Semi-Primitive, Nonmotorized (SPNM) acres and limit additional Semi-Primitive Motorized (SPM) and Roaded Natural (RN) acres by closing roads which are determined to be unneeded and allowing creation of temporary roads only for resource utilization.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DC for Roaded Backcountry LUZ: Recreation opportunity spectrum classes in this land use zone are semiprimitive nonmotorized, semiprimitive motorized, roaded modified, and roaded natural except where there are small, remote administrative sites, developed recreation sites, and permitted facilities. (page 100)

GD for Roaded Backcountry: New roads may be constructed, reconstructed, or relocated for a variety of public and administrative uses and needs. (page 100)

GD for Developed Recreation LUZ: Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting. (page 101)

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others). (page 102)

GDs for Roaded Backcountry LUZ (page 100):

- The level and type of development should be limited in order to protect the natural character inherent in this zone.
- Managers should consider expanding the uses of existing facilities before proposing new facilities.
- New roads may be constructed, reconstructed, or relocated for a variety of public and administrative uses and needs.

GDs for Wild Backcountry LUZ (page 99):

- Recreation opportunity spectrum classes in this land use zone should be primitive, semiprimitive nonmotorized, and semiprimitive motorized except in areas where the recreation setting is influenced by motorized access in adjacent land use zones or by private inholdings.
- Temporary roads should be allowed only for administrative access, national security, tribal needs, forest health projects, or fires, except in inventoried roadless areas (IRAs).
- New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection.

FW DCs for Motorized Transportation (pages 74 and 75):

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion.

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Also see FW direction for "Transportation System Planning: Road Maintenance" (p. 122).

Dispersed motorized camping is generally suitable in wild backcountry, developed recreation, and roaded backcountry LUZs (chapter 5, table 14).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines-Visual Resource Management

1986 Plan Content

(page 50)

1. Manage the following acres at the indicated visual quality objectives:

- 23,694 acres Retention (87 percent)
- 2,996 acres Partial Retention (11 percent)
- 272 acres Modification (1 percent)
- 272 acres Maximum Modification (1 percent)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (USDA FS 2015c) (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Wild Backcountry LUZ: Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map. (page 99)

GD for Developed Recreation LUZ: Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment. (page 101)

GD for Roaded Backcountry LUZ: Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map. (page 100)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines-Trail Construction and Reconstruction

1986 Plan Content

1. Construct trailhead as follows:

- Period 3 - Construct trailhead parking lot with two unit vault toilet. (page 51)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level.

Standards and Guidelines-Wildlife and Fish

1986 Plan Content

(page 51)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed threatened and endangered plants and animals and work toward delisting.

(2) Maintain 80 percent or more of primary and secondary cavity nester habitat in timber, aspen, and Gambel's oak stands.

(3) Maintain or improve current levels of occupied habitat for:

- white-tailed deer
- black bear
- Mt. Graham red squirrel
- Other squirrel species
- Merriam's turkey
- buff-breasted flycatcher
- raptors
- Arizona ridge-nosed rattlesnake
- twin-spotted rattlesnake
- rock rattlesnake
- Arizona trout
- Mexican spotted owl
- northern goshawk

(4) Studies to define the life history and ecology of the red squirrel and the spruce-fir and mixed conifer forest will be conducted for at least a 10-year period. Studies will also include human/wildlife encounters and potential impacts. Specific studies to be conducted will be determined by appropriate agencies and the University of Arizona. Funding responsibilities will be part of the final study determination.

(5) Monitor squirrel population and habitat annually through inventory and analysis. Red squirrel habitat needs will supercede the needs of all other species.

Revised Forest Plan Direction

See FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines-Wildlife, Fish, and T&E Habitat Improvement / Maintenance

1986 Plan Content

(page 51)

1. Maintenance of structural and nonstructural habitat improvements will be based on guidelines shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Maintain and improve occupied habitat for:

- Mt. Graham red squirrel
- white-tailed deer
- black bear
- Merriam's turkey
- buff-breasted flycatcher
- Arizona trout
- Mexican spotted owl
- northern goshawk

(2) Maintain horizontal and vertical plant diversity.

(3) Delist threatened and endangered species and reoccupy historical habitat with other identified species following guidelines of approved recovery plans and Memoranda of Understanding.

(4) Improve old growth spruce-fir and mixed conifer forest habitat conditions for the Mt. Graham red squirrel.

(5) Reforest existing fuelbreaks, clearcuts, and roadbeds as needed to increase habitat for Mt. Graham red squirrel.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines-Range Management

1986 Plan Content

(page 51)

1. Manage rangeland at level A (no livestock) or B (some livestock). See appendix C for definition of range management.

Range Management Levels

Level	Acres
A	12,900
B	14,334

Management excludes most livestock grazing, except for recreational animals to protect other values or eliminate conflicts with other uses. Livestock grazing may continue where it currently exists without detriment to emphasized resources and uses.

Projected Range Condition

Condition	Period 1 acres	Period 5 acres
Satisfactory	14,334	14,334
Unsatisfactory	12,900	12,900

Revised Forest Plan Direction

Wild backcountry and roaded backcountry areas are generally suitable for livestock grazing; developed recreation areas are generally unsuitable for livestock grazing (table 14, page 167).

GD for Developed Recreation LUZ: Livestock grazing should not be permitted within developed recreation zone sites, except where designated allotments overlap with recreation area boundaries or for the purposes of targeted grazing for vegetation management. (page 101)

Rationale for Change(s)

Overly prescriptive at the forest plan level. The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines-Range Improvement

1986 Plan Content

1. Range improvements are minimal and constructed only to the extent needed to protect and maintain other resources in the presence of livestock grazing. (page 52)

Revised Forest Plan Direction

DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

GDs for Range Management (pages 91 and 92):

- Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes.
- Treatments for restoring rangelands should emphasize the use and perpetuation of native plant species.
- Management practices to achieve desired plant communities should consider protection and conservation of known cultural resources, including historical sites, prehistoric sites, and plants of significance to Native American peoples.

MA for Range Management: Reviewing current management of each active allotment at least once every 3 to 5 years to identify consistency with current grazing authorization decisions (National Environmental Policy Act or NEPA). (page 92)

GD for Developed Recreation LUZ: Livestock grazing should not be permitted within developed recreation zone sites, except where designated allotments overlap with recreation area boundaries or for the purposes of targeted grazing for vegetation management. (page 101)

Rationale for Change(s)

Revised as broader direction. Livestock grazing projects and activities are implemented through site-specific NEPA for allotments and annual operating instructions. Further direction provided by existing law (ESA), regulation, and policy (see appendix F).

Standards and Guidelines-Timber Sale and Administration

1986 Plan Content

(page 52)

1. Silviculturally manage the tree resource under uneven or even-age management, as appropriate, with emphasis upon recreation, visual quality, wildlife, and watershed. Complete stand examinations of all suitable acres.

2. The removal of timber is based on a 240-year rotation using group selection and small-patch shelterwood cuts to feature four age classes, plus wildlife openings. The desired age class structure is as follows:

Class / Age / Percent of Total Acres

- Seedling-sapling / 0 to 60 years / 40 percent (including openings)
- Poles – sawtimber / 61to 120 years / 20 percent
- Mature sawtimber / 121 to 180 years / 20 percent
- Old growth sawtimber / 181 to 240 years / 20 percent

Within the 0 to 60 and 61 to 121 year old stands, maximum basal areas should be maintained for thermal cover. Stocking should not be so high as to cause stand stagnation and decreased tree vigor (less than 120 BA). In the two older age classes, basal area should vary so that 25 to 50 percent of the stands are opened up (40 BA) and the other 50 to 75 percent are dense (up to 120 BA).

Existing meadows in the mixed conifer and spruce-fir types are not included in the suitable timber landbase. They will be maintained as open meadows. Additional wildlife openings will be created through timber harvest practices. These will normally rotate as part of the harvest cycle.

Revised Forest Plan Direction

DC for Forest Products: Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. (page 70)

STs for Forest Products (page 70):

- Harvesting systems should be selected based on their ability to meet desired conditions and not on their ability to provide the greatest dollar return.
- On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety, or if needed to meet statutory requirements, e.g., mining law.

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

Desired conditions and direction for silvicultural management, including standards and guidelines for protection of certain components (e.g., old growth), are prescribed by vegetation community which varies across management areas.

Regarding management emphasis in Management Area 2, refer to "Management Emphasis and Intensity" (p. 148).

Timber harvest for ecosystem restoration is generally suitable in wild backcountry, developed recreation, and roaded backcountry LUZs (revised plan, chapter 5).

Rationale for Change(s)

Revised as broader direction. Plan components are prescribed forestwide and across management areas and vegetation communities to meet desired conditions. Other direction related to timber harvest and forest products provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Reduce slash from wood harvest by offering logging residue as fuelwood. Residual slash will be treated within two years. Within suitable habitat for the Mt. Graham red squirrel (Pinaleno Mountains), dead and down material will not be removed for fuelwood, except for on-site recreational use. (page 52)

4. Within suitable habitat for the Mt. Graham red squirrel (Pinaleno Mountains), Christmas trees will not be harvested.

Revised Forest Plan Direction

MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Encouraging use of forest products through stewardship contracting in lieu of onsite burning or chipping through stewardship contracting.

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

Regarding timber sale and administration, desired conditions and direction for silvicultural management, including standards and guidelines for retention of certain components (e.g., old growth), are prescribed by vegetation community which varies across management areas.

DC for Pinaleño EMA: The Mount Graham Astronomical and Biological Research Area provides habitat for the Mount Graham red squirrel and astrophysical research at the Mount Graham International Observatory. Recreational uses or management activities do not degrade these special habitats. (page 156)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

GDs for Pinaleño EMA: Within habitat for Mount Graham red squirrel (page 156):

- Red squirrel habitat needs should supersede the needs of all other species of plants and animals.
- Vegetation treatments should be designed and implemented to avoid disturbance of Mount Graham red squirrel middens.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Other direction provided by existing law (e.g., ESA), regulation, and policy (see appendix F). Plan components are prescribed forestwide, across management areas and vegetation communities, and for species or specific resources, to meet desired conditions.

Standards and Guidelines-Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Restore damaged watersheds to a satisfactory watershed condition. (page 52)

Watershed treatment is a low priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See appendix D for appropriate activities.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Manage all programs to eliminate or minimize onsite and downstream water pollution. (page 52)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects. (page 53)

Revised Forest Plan Direction

See FW direction for “Watershed and Soil Maintenance: Water Conservation” (p. 97).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines-Minerals Management

1986 Plan Content

1. Common materials may be removed for the purpose of meeting other management objectives. (page 53)

Revised Forest Plan Direction

FW DCs for Minerals (pages 71 and 72):

- Opportunities for environmentally sound minerals development are available.
- All mineral exploration and mining activities are operating in environmentally sound ways through protection and mitigation measures, including adequate post-mining reclamation assurances, to minimize environmental impacts to other national forest resources. (page 70)

FW GD for Minerals: Talus slopes should not be used as a common variety mineral materials source where disturbance would destabilize the talus slopes and alter any endemic or rare species habitat or presence. (page 72)

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines-Lands Administration

1986 Plan Content

(page 53)

1. Attempt to acquire private lands that will "fill-in" ownership pattern resulting in more effective management of National Forest lands.

2. Act on all exchange offers that appear to be in the public interest.

Revised Forest Plan Direction

See FW direction for “Land Classification: Ownership Adjustment” (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Road and Trail Maintenance

1986 Plan Content

(page 53)

1. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, resource protection, and user comfort. Maintain 40 percent of roads to level 3, 50 percent to level 4, and 10 percent to level 5. See appendix E for a definition of levels.

Revised Forest Plan Direction

See FW direction for "Transportation System Planning: Road Maintenance" (p. 122); and "Dispersed and Developed Recreation and Wilderness: Transportation" (p. 67).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

2. Close, drain, and revegetate roads and trails that are determined to be unneeded for further use. This should be a cost of the initiating resource element. (page 53)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Road Maintenance" for Management Area 1 (p. 144).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

(page 53)

3. Between approximately November 15 and April 15 each year, Swift Trail (State Road 366), beginning at its intersection with Forest Road 507 to its terminus, will be closed to all motorized vehicles except those officially authorized.

4. All access roads leading off Swift Trail above Forest Road 507 and including Road 352 (Heliograph Peak Road) will be closed to all motorized vehicles except those officially authorized. This does not include access roads into developed public recreation sites.

Revised Forest Plan Direction

DC for Pinaleño Ecosystem Management Area: The Swift Trail Parkway, a State designated scenic byway, provides vehicular access to the ecosystem management area's primary recreational opportunities year round and access to high elevations from spring to fall. The scenic, natural qualities valued by visitors are retained. (page 155)

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically

authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The management area is in fire suppression zone 1 based on resource objectives. See Section 5 for definition of zones. (page 53)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

2. Require 100 percent slash treatment within cleared right-of-way boundaries.

3. Within foreground distance zones of sensitivity level 1 and 2 (trails, roads, use areas, and water bodies) require 100 percent treatment of all activity slash. (page 53)

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Encouraging use of forest products through stewardship contracting in lieu of onsite burning or chipping through stewardship contracting.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Project-level decisions and design criteria will be determined on a site-specific basis.

1986 Plan Content

4. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering. (page 53)

Revised Forest Plan Direction

See FW direction for "Timber Management: Fuelwood and Other Products" (p. 95).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats (e.g., MSO and NOGO) to protect or retain certain components (e.g., snags).

1986 Plan Content

(page 53)

5. Prescribed fire will be used to reduce fuel hazard and enhance wildlife habitat.

6. All projects that include prescribed fire will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Fire and Fuels Management" for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

7. Burn logging slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs. (page 53)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project-level decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 53)

1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damage from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable.

2. Recognize and prevent conditions favorable for insect and disease outbreaks.

3. Dispose of logging and construction slash prior to next field season or next flight of insect.

Revised Forest Plan Direction

Same as “Standards and Guidelines- Insect and Disease Management” for Management Area 1 (p. 147).

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

Rationale for Change(s)

Redundant with FW direction.

Management Area 2A

Dispersed Recreation/ Timber Harvest; Proposed Mount Graham Astrophysical and Biological Research Area. Management Area 2A provides direction for management of old-growth forest dependent species such as the Mount Graham red squirrel (*Tamiasciurus hudsonicus grahamensis*), and operation and maintenance of Mount Graham astrophysical facilities (a special use). These lands in the Pinaleño Mountains comprise 3,071 acres (less than 1 percent of the national forest) of coniferous forest, in which slopes are generally less than 40 percent in the spruce-fir community and greater than 40 percent in the mixed-conifer community.

Management Emphasis and Intensity; and Summary of Management Emphasis

1986 Plan Content

(page 54)

Manage to provide opportunities for astronomical and biological research, perpetuation of wilderness values, and unique wildlife and vegetative species.

Provide for an increase in habitat for the endangered Mt. Graham red squirrel while allowing for a minimum level of astrophysical facilities development.

Use restrictions will be imposed as necessary to protect physical, biological, and astronomical qualities of the area.

Resource management activities will only be done to enhance wildlife or astronomical values.

Watershed conditions will be maintained or improved.

Summary of Management Emphasis:

Wilderness = 442 acres

Biological Research (Red Squirrel Refugium) = 1,616 acres (Mt. Graham red squirrel and spruce-fir)

Astronomical/Biological Research = 134 acres

Astronomical Use = 16 acres

Dispersed Recreation = 863 acres

Note: Maintenance and improvement of red squirrel habitat is the primary emphasis for areas considered to be suitable habitat.

Revised Forest Plan Direction

Management Area 2A is reclassified as predominantly the **Mount Graham Astrophysical and Biological Research Area (Mount Graham Red Squirrel Refugium).** This 2,937-acre area encompasses the highest elevations of the Pinaleño Ecosystem Management Area. Management of the area emphasizes biological research for the Mount Graham red squirrel and spruce-fir vegetation type at the Mount Graham Red Squirrel Refugium, and astronomical research at the Mount Graham International Observatory. Following is key direction for this area and specific resources.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Each special area provides an example of one or more unique features within the Coronado National Forest. Scenic conditions are natural, unaltered, and wholly intact.
- Landscape character and sense of place are evident at the highest possible level. Research and monitoring activities do not disturb archaeological sites.

DCs for the Pinaleño Ecosystem Management Area (page 156):

- The Mount Graham Astronomical and Biological Research Area provides habitat for the Mount Graham red squirrel and astrophysical research at the Mount Graham International Observatory.
- Recreational uses or management activities do not degrade these special habitats.

GDs for Pinaleño EMA: Within habitat for Mount Graham red squirrel (page 156):

- Red squirrel habitat needs should supersede the needs of all other species of plants and animals.
- Vegetation treatments should be designed and implemented to avoid disturbance of Mount Graham red squirrel middens.

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

The 1986 recommended/proposed special area was designated in 1989 under the Arizona-Idaho Conservation Act. Therefore, this decision is carried forward and supported by both FW direction and more explicit direction for management areas, vegetation communities, and species.

Management Area Description and Capability Area Types

1986 Plan Content

(page 54)

Coniferous forest lands that have been determined to be suitable for both astronomical research and habitat for old growth forest dependent species such as the Mt. Graham red squirrel.

Slopes generally less than 40 percent in the spruce-fir vegetative type and generally greater than 40 percent in the mixed conifer vegetative type.

Located in the Pinaleno Mountain Range.

Capability Area Types: 4M (mountain grassland), 9CHM (coniferous forest, Douglas-fir/pine), and 9DBM (coniferous forest, spruce-fir)

Total acres = 3,071

Revised Forest Plan Direction

As noted above, Management Area 2a is reclassified as predominantly the Mount Graham Astrophysical and Biological Research Area (Mount Graham Red Squirrel Refugium). Management of the area emphasizes biological research for the Mount Graham red squirrel and spruce-fir vegetation type at the Mount Graham Red Squirrel Refugium, and astronomical research at the Mount Graham International Observatory. See key direction above for more details.

Rationale for Change(s)

Primarily descriptive information, not a plan component. The 1986 recommended/proposed special area was designated in 1989 under the Arizona-Idaho Conservation Act. Therefore, this decision is carried forward and supported by both FW direction and more explicit direction for management areas, vegetation communities, and species. Capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

(page 54)

Timber Suitability:

- Tentatively suitable for timber production = 3,071 acres
- Not appropriate for timber production = 3,071 acres
- Suitable for timber production = 0 acres

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production. (page 170)

However, timber harvest for the purpose of ecosystem restoration is generally a suitable use in the Mount Graham Astrophysical and Biological Research Area (see revised plan, table 14).

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis.

Standards and Guidelines-Dispersed Recreation

1986 Plan Content

(page 54)

1. Trails and trailheads will be closed and not maintained for public use within the red squirrel refugium. Those that provide access to trails outside the refugium will be relocated.

2. Hiking will be allowed along the observatory access road and in other areas outside the refugium. Trails will be maintained to level 2 (near primitive). See Glossary, Trail Maintenance.

Revised Forest Plan Direction

DCs for the Pinaleño EMA (pages 155 and 156):

- Trails in the Mount Graham Astrophysical and Biological Research Area are open to hikers and visitors who are provided with information about the cultural significance of the area and the ways to be respectful.
- The Mount Graham Astronomical and Biological Research Area provides habitat for the Mount Graham red squirrel and astrophysical research at the Mount Graham International Observatory. Recreational uses or management activities do not degrade these special habitats.

ST for the Pinaleño Ecosystem Management Area: Within habitat for the Mount Graham red squirrel, no new recreational residence or developed recreation areas will be established. (page 156)

GD for the Pinaleño Ecosystem Management Area: Within habitat for Mount Graham red squirrel: Hiking use levels should not negatively impact Mount Graham red squirrel habitat or individuals. (page 156)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the “Coronado National Forest Sustainable Recreation Action Plan” (USDA FS 2015d).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Revised as broader direction. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

(page 54)

3. Use of motorized vehicles is allowed only on the new observatory access road. No public or private vehicles will be allowed except by permit. Workers will be shuttled to the observatory. Road 669 will be gated closed to all but official vehicles beyond the observatory boundary.

4. Road 507 will be closed to public motorized vehicles at the junction with Swift Trail. Nonmotorized activities will be permitted along the first 1.8 miles to the red squirrel refugium boundary.

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Motorized access and off-highway-vehicle-focused recreation are generally not suitable uses in the Mount Graham Astrophysical and Biological Research Area (see table 14, page 167)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Also see above direction related to trail use and nonmotorized activities.

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

5. No snowmobiles are permitted except for approved administrative activities. Facilities for snow play activity (tubing/sledding) will not be provided. (page 54-1)

Revised Forest Plan Direction

None

Rationale for Change(s)

Decision not carried forward in the revised forest plan. Direction provided by existing regulation and policy, namely the Travel Management Rule (73 FR 74689). The Travel Management Rule does not require units to designate roads, trails, and areas for over-snow travel. The final rule retains current authorities to manage use of National Forest System lands by over-snow vehicles, which may be allowed, restricted or prohibited at the local level. Over-snow vehicles result in different impacts to natural resources than motor vehicles traveling over the ground. It may therefore be appropriate for snowmobiles and other over-snow vehicles to travel cross-country in some places where other vehicles are restricted to designated roads, trails, and areas. The final rule expands this exemption to include other over-snow vehicles in addition to snowmobiles.

1986 Plan Content

(page 54-1)

6. Manage dispersed use at the following service levels: 1,750 acres at less than standard (red squirrel refugium). No public use permitted except as part of shuttle tour. 863 acres at less than standard. Nonmotorized public uses permitted.

7. Manage ROS classes as follows:

Semi-primitive nonmotorized – 2,275 acres; roaded natural – 780 acres; urban – 16 acres.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

ST for the Pinaleño Ecosystem Management Area: Within habitat for the Mount Graham red squirrel, no new recreational residence or developed recreation areas will be established. (page 156)

Also see direction, "Management Emphasis and Intensity" for Management Area 2A (p. 167).

Dispersed motorized camping is generally not a suitable use in the Mount Graham Astrophysical and Biological Research Area (table 14, page 167)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

(page 54-1)

8. Develop an interpretive program for the natural and physical sciences considering the following techniques:

(a) Employing volunteer interpreters and educators.

(b) Publishing plant and animal guides, visitor etiquette brochures, and astronomical information.

(c) Building environmental displays.

(d) Conducting visitor programs.

Revised Forest Plan Direction

DCs for the Pinaleño Ecosystem Management Area (page 155):

- Trails in the Mount Graham Astrophysical and Biological Research Area are open to hikers and visitors who are provided with information about the cultural significance of the area and the ways to be respectful.
- The mountain provides a setting for the education of tribal youth in culture, history, and land stewardship.

- Interpretive and educational exhibits or other media that focus on the history of the Coronado, provide the public a greater understanding and appreciation of Apache history, culture, and traditions (page 153)

MAs for the Pinaleño Ecosystem Management Area (page 157):

- Using education to improve understanding of special management areas.
- Collaborating with the Pinaleño Partnership in their area of interest.

FW MAs for Recreation (page 79):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.

Also see "Human Resource Programs: Volunteers" (p. 104), related to forestwide goals and desired conditions for volunteerism.

Rationale for Change(s)

Revised as broader direction. Primary direction provided by existing regulation, policy, and guidance (see appendix F).

1986 Plan Content

(page 54-1)

9. The following applies to the 16 -acre astrophysical permitted use area:

Prohibit all hunting, camping, hiking, and campfires. Limited daylight public access. Roadway closed at night. Radio transmissions controlled. Fencing may be used to limit access to the area. Pets are required to be kept on a leash within all areas of the refugium where there is public access.

Revised Forest Plan Direction

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others). (page 102)

See above direction related to recreation activities and access in the refugium.

Dispersed motorized recreation, motorized access, recreation facilities, and use of fuelwood products are generally not suitable uses in the Mount Graham Astrophysical and Biological Research Area (table 14, page 167)

Rationale for Change(s)

Overly prescriptive at the forest plan level. As described in the plan, utilitarian facilities such as communication sites and astrophysical facilities generally found in developed recreation LUZs have limited or no public access.

Standards and Guidelines-Visual Resource Management

1986 Plan Content

(page 54-1)

1. Manage the following acres at the indicated visual quality objectives:

- 442 acres Preservation (14 percent)
- 2,613 acres Retention (85 percent)
- 16 acres Modification/Maximum modification (less than 1 percent)

2. Trees will remain dominant and continuous along skyline. Trees will be used to assist in screening structures. Telescope structures will use colors that blend into the landscape, except for possibly southerly aspects. Astrophysical areas will be shaped and revegetated to assist in screening structures. Astrophysical sites will be designed to best fit the natural landscape.

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Developed Recreation LUZ: Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment. (page 101)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Cultural Resource Management

1986 Plan Content

1. All cultural sites will be avoided by management activities. Sites AR03-05-04-101 and AR03-05-04-102 will be managed for long-term preservation. Additional specific standards and guidelines for cultural resource management are shown in the Coronado National Forest Plan under management prescriptions applicable to all areas of the Forest. (page 54-1)

Revised Forest Plan Direction

DCs for the Pinaleño Ecosystem Management Area (page 155):

- Trails in the Mount Graham Astrophysical and Biological Research Area are open to hikers and visitors who are provided with information about the cultural significance of the area and the ways to be respectful.
- The integrity of the western Apache Traditional Cultural Property is retained or improved wherever feasible.

FW DCs for Cultural Resources (page 87):

- Cultural resources on the Coronado National Forest, including known Native American sacred sites and traditional cultural properties, are preserved, protected, and/or restored for their cultural and scientific importance.
- As appropriate, historically significant cultural properties are listed on the National Register of Historic Places. The Coronado's priority cultural resource assets are protected and preserved. Archaeological, ethnographic, and historical data guide efforts to manage current ecosystems and, in some cases, restore historic ones.

Rationale for Change(s)

Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Developed Recreation

1986 Plan Content

(page 54-1)

1. Develop an interpretive program for the natural and physical sciences as part of any off-Forest visitor center and as part of the observatory shuttle. Added emphasis to be placed on visitor etiquette and protection of natural resources.

2. Minimal picnic facilities will be provided within the permitted astronomical use area for observatory visitors. These will be incorporated with parking and other facilities.

3. The astrophysical permittee will provide a shuttle service for observatory visitors. This service will operate seven days a week during the approximate period of April 15 to November 15.

Revised Forest Plan Direction

See above direction regarding interpretative programs and related activities in Management Area 2a.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Primary direction provided by existing regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Wilderness Recreation

1986 Plan Content

1. Trails will be maintained to level 2 (near primitive). See Glossary, Trail Maintenance. (page 54-2)

Revised Forest Plan Direction

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Also see above direction regarding trail activities and maintenance in Management Area 2a.

Rationale for Change(s)

Redundant with other direction and overly prescriptive at the forest plan level. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Use of motorized vehicles is prohibited, except as approved for emergency or other special needs. (page 54-2)

Revised Forest Plan Direction

See above direction regarding motorized vehicle use in Management Area 2a.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

3. Recommend 442 acres for inclusion in the Wilderness Preservation System. Manage wilderness at 100 percent less than standard. (page 54-2)

Revised Forest Plan Direction

The 1986 Management Area 2a encompasses approximately 6 acres of the Mount Graham Wilderness Study (WSA) Area. As described above in FW goals and desired conditions, the Mount Graham WSA is recommended wilderness under the revised forest plan (recommendation carried forward from 1986). All wilderness areas are managed to maintain their wilderness character, per the following.

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness areas should be managed to maintain their wilderness character, which includes scenic resources, primitive recreation settings and fish and wildlife habitats.
- Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources.

- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.

Rationale for Change(s)

Redundant with other direction.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

1. Within the red squirrel refugium (1,750 acres) the general objective is to reduce human/wildlife conflicts and improve the habitat of the red squirrel. Red squirrel habitat needs will supercede the needs of all other species. (page 54-2)

Revised Forest Plan Direction

See above direction regarding management emphasis for Management Area 2a.

Rationale for Change(s)

Redundant with management emphasis direction.

1986 Plan Content

2. Studies to define the life history and ecology of the red squirrel and the spruce-fir and mixed conifer forests will be conducted for at least a 10-year period. Studies will also include human/wildlife encounters and potential impacts. Specific studies to be conducted will be determined by appropriate agencies and the University of Arizona. Funding responsibilities will be part of the final study determination. 3. Monitoring of red squirrels within and adjacent to the observatory and associated roads will be done during the life of the operation. This will be the responsibility of the observatory permittee with guidance from appropriate agencies. (page 54-2)

Revised Forest Plan Direction

None

Rationale for Change(s)

As discussed above, research is one of the primary purposes for which the area was designated: Management of the area emphasizes biological research for the Mount Graham red squirrel and spruce-fir vegetation type at the Mount Graham Red Squirrel Refugium, and astronomical research at the Mount Graham International Observatory.

Decisions regarding study design and funding are overly prescriptive at the forest plan level.

1986 Plan Content

(page 54-2)

4. Specific standards and guidelines for management of wildlife are shown in the Coronado National Forest Plan under the Forestwide prescription for activities appropriate to the Management Area. These are intended to meet the following objectives:

(a) Improve current habitat for the endangered Mt. Graham red squirrel and work toward delisting. Emphasize establishment and maintenance of old growth forests within the entire Management Area.

(b) Assist in the establishment and implementation of recovery plans for all Federally listed threatened or endangered species.

(c) Inventory and analyze population levels and habitat quality for all appropriate management indicator species in order to monitor plan objectives.

(d) In spruce-fir, mixed conifer, and aspen stands maintain at least 80 percent of the existing primary and secondary cavity nesting habitat during any activity.

Revised Forest Plan Direction

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Also see FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Revised as multiple decisions to address wildlife, fish, and plant habitat needs; and coordination and consultation with agencies and partners. Primary direction for listed species is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Designating critical habitat and developing recovery plans, goals, and strategies are the authority of the U.S. Fish and Wildlife Service. However, the Forest Service generally provides input on these plans and decisions.

1986 Plan Content

5. Construction activities will utilize methods to minimize windthrow or blowdown in spruce-fir and mixed conifer forests. Small trees that would be destroyed by construction activities will be salvaged for use in reforestation efforts. (page 54-2)

Revised Forest Plan Direction

Same as Management Area 2 direction for Forest Products.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

1986 Plan Content

6. Implement an effective environmental education program (See Dispersed Recreation Management guidelines) to lessen the impacts of recreation uses on the area. (page 54-3)

Revised Forest Plan Direction

See above direction regarding interpretative programs and related activities in Management Area 2a.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

7. Monitor squirrel population and habitat annually through inventory and analysis. (page 54-3)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. As discussed above, research is one of the primary purposes for which the area was designated: Management of the area emphasizes biological research for the Mount Graham red squirrel and spruce-fir vegetation type at the Mount Graham Red Squirrel Refugium, and astronomical research at the Mount Graham International Observatory.

Standards and Guidelines- Wildlife Habitat Maintenance and Nongame Habitat Improvement

1986 Plan Content

(page 54-3)

1. Maintenance and improvement of structural and nonstructural improvement activities will be commensurate with the Wilderness Act and guidelines shown in the Coronado National Forest Plan Forestwide prescription. They are intended to meet the following objectives:

(1) Improve habitat for the endangered Mt. Graham red squirrel. Develop a recovery plan to identify specific habitat improvement measures.

(2) Improve old growth spruce-fir and mixed conifer forest habitat conditions.

(3) Reforest existing fuelbreaks, clearcuts, and roadbeds to increase habitat for old growth dependent species including the Mt. Graham red squirrel. Reforestation efforts in red squirrel habitat will be initiated immediately with the objective of completing initial efforts in 5 years. The University of Arizona will share in the cost of this effort.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Timber harvest for the purpose of ecosystem restoration is generally a suitable use in the Mount Graham Astrophysical and Biological Research Area (table 14, page 167)

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

1. Manage rangeland at level A (no livestock). Exclude livestock grazing including recreational animals to protect wildlife values. (page 54-3)

Revised Forest Plan Direction

The Mount Graham Astrophysical and Biological Research Area is generally not suitable for livestock grazing (appendix E).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. For other areas outside the Mount Graham Astrophysical and Biological Research Area, livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Timber Management

1986 Plan Content

1. Within the Management Area, removal of vegetation is limited to research activities under permit, sanitation and salvage operations, and maintenance and improvement of wildlife habitat. (page 54-3)

Revised Forest Plan Direction

DCs for the Pinaleño Ecosystem Management Area (page 156):

- The Mount Graham Astronomical and Biological Research Area provides habitat for the Mount Graham red squirrel and astrophysical research at the Mount Graham International Observatory.
- Recreational uses or management activities do not degrade these special habitats.

GDs for Pinaleño EMA (page 156): Within habitat for Mount Graham red squirrel:

- Red squirrel habitat needs should supersede the needs of all other species of plants and animals.
- Vegetation treatments should be designed and implemented to avoid disturbance of Mount Graham red squirrel middens. (page 154)

Timber harvest for the purpose of ecosystem restoration is generally a suitable use in the Mount Graham Astrophysical and Biological Research Area (table 14, page 167)

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

2. Use of down woody material for firewood is restricted to on-site recreational use within areas open to public use (863 acres). (page 54-3)

Revised Forest Plan Direction

Same as Management Area 2 direction for Forest Products.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

(page 54-3)

1. Maintain satisfactory watershed condition.

2. Watershed maintenance and improvement may consist of channel work (including debris clearing and structures) and revegetation (seeding and planting) using native or non-native species. Additionally, in the astrophysical developed area, contour structures including earth structures (such as dikes, trenches, and felled trees) may be used.

Revised Forest Plan Direction

Same as “Standards and Guidelines- Watershed and Soil Maintenance and Improvement” under Management Area 1 (p. 143).

DC for the Pinaleño EMA: Watersheds provide high quality surface and ground water flows. (page 156)

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

3. Watershed restoration within wilderness may consist of channel stabilization (including debris clearing and structures) and revegetation (seeding and planting). Non-native species will be used only in emergency situations when suitable native species are not available. (page 54-3)

Revised Forest Plan Direction

The 1986 Management Area 2a encompasses approximately 6 acres of the Mount Graham Wilderness Study (WSA) Area. As described above in FW goals and desired conditions, the Mount Graham WSA is recommended wilderness under the revised forest plan (recommendation carried forward from 1986). All wilderness areas are managed to maintain their wilderness character, per the following.

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness areas should be managed to maintain and enhance their wilderness character, which includes scenic resources, primitive recreation settings and fish and wildlife habitats.
- Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources.
- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

4. Manage all programs to eliminate or minimize on-site and downstream water pollution. Wastewater (sewage and gray water) will be handled with approved septic tank/drain field systems. During construction phases, areas will be cleared only for construction planned for in that year. All toxic waste chemicals and materials will be hauled off the Forest to a suitable treatment or disposal facility. Garbage and trash will be hauled off Forest to a suitable disposal site. Topsoil will be stockpiled and redistributed to provide a fertile base, and slopes will be revegetated with native species. Cut material (soil and rock) from construction not used as fill or for revegetation will be hauled off the Forest to a suitable disposal site. Significant construction and operation activities will not be allowed within the cienega watersheds. (page 54-3)

Revised Forest Plan Direction

See FW direction for “Watershed and Soil Maintenance: Project BMPs” (p. 98).

DC for the Pinaleño EMA: Watersheds provide high quality surface and ground water flows. (page 156)

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Much of the 1986 decision is overly prescriptive at the forest plan level, and issues are addressed by existing law, regulation, policy, and guidance (appendix F).

1986 Plan Content

5. All domestic and construction water needed on-site will be hauled from City of Safford's Deadman Canyon water supply or from other locations off the Forest. (page 54-4)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Project-level decisions and design criteria will be determined on a site-specific basis.

1986 Plan Content

6. The character of the cienegas will be maintained naturally (including annual free water fluctuations, channel characteristics, water quality, and composition and density of riparian vegetation). Surface water flows will not be diverted or impounded within the cienegas. (page 54-4)

Revised Forest Plan Direction

See FW direction for “Watershed and Soil Maintenance: Project BMPs” (p. 98).

Rationale for Change(s)

Revised as FW direction for watersheds and associated resource/subject areas. Direction also provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Common materials may be removed for any purpose. (page 54-4)

Revised Forest Plan Direction

Same as above direction for minerals management in Management Area 2 (p. 162).

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

2. Recommend withdrawal from mineral entry and mineral leasing on 2,629 acres to protect essential habitat for Federal and State listed threatened and endangered species and astronomical research operations. Mineral withdrawal is automatic with wilderness designation for the remaining 442 acres. (page 54-4)

Revised Forest Plan Direction

ST for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Salable minerals extraction will not be allowed. (page 123)

ST for Recommended Wilderness Areas and Wilderness Study Areas: Salable minerals extraction will not be allowed. (page 119)

MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to: Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 95)

Energy development is generally not a suitable use in the Mount Graham Astrophysical and Biological Research Area (see revised plan, chapter 5).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Special Use Management

1986 Plan Content

1. Allocate 150 acres of land on and around Emerald Peak for astronomical research and testing. Testing permits for High Peak or other areas will be terminated. Sixteen acres of the 150 acres will be allocated as an astrophysical permitted use area. Within this area, three telescopes could be developed immediately; the 10-meter submillimeter telescope (SMT), the 11.3-meter Columbus optical/IR and the Vatican Observatory Advanced Technology 1.8-meter Telescope (VATT). The other 134 acres will be fore astronomical testing using non-disruptive methods and facilities. Additional telescopes likely to be considered during the testing phase include: the Smithsonian Interferometer array, a replacement of the VATT with an 8-meter optical/IR telescope, a 5-0meter submillimeter telescope, and two additional 8-meter optical/IR telescopes. (page 54-4)

Revised Forest Plan Direction

None

Rationale for Change(s)

The 1986 recommended/proposed special area was designated in 1989 under the Arizona-Idaho Conservation Act. As discussed above, research is one of the primary purposes for which the area was designated: Management of the area emphasizes biological research for the Mount Graham red squirrel and spruce-fir vegetation type at the Mount Graham Red Squirrel Refugium, and astronomical research at the Mount Graham International Observatory.

1986 Plan Content

2. Restrict only those uses necessary for safety and to protect the quality of observations and the environment. Public use restrictions are shown under recreation management. (page 54-4)

Revised Forest Plan Direction

None

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

(page 54-4 and 54-5)

3. Astrophysical support facilities, such as a dormitory and/or visitor center, will be located off-Forest. Astrophysical support facilities located on-Forest will include buildings for a maintenance shop and equipment, utilities, meteorological tower, communications, water storage, a site engineer's residence, and helicopter landing pad. Sleeping accommodations within astrophysical facilities are allowed. 4. All astrophysical development will conform with the total required facilities concept (allocation for the minimum area that would be needed for facilities and still meet the need of the special use applicant, FSM 2728.22c).

5. A management plan for the construction and operation of the observatory and associated road systems will be developed in a way to least likely have adverse effects on the red squirrel. The plan will include standards and guidelines for human activities on the site and adjacent areas. If additional facilities are approved after the 10-year study period, the management plan will be revised to include the additions.

6. Monitoring and inspection activities will assure compliance and immediate control of construction and operation activities.

7. A construction fence delineating the areas of ground-disturbance impact will be placed around each development site prior to the start of construction.

8. Existing Roads 507 and 669 will remain available, without modification, to the observatory permittee for the purpose of site engineering, test drilling, and site preparation. This availability will apply only until the new access road is completed or no later than one year following issuance of the observatory permit.

Revised Forest Plan Direction

None

Rationale for Change(s)

The 1986 recommended/proposed special area was designated in 1989 under the Arizona-Idaho Conservation Act. The site is currently managed under a special use permit.

Standards and Guidelines- Road Maintenance and Construction

1986 Plan Content

(page 54-5)

1. The new access road will have up to a 14-foot wide bed, a gravel or compacted surface. The road will be located to avoid degrading existing midden habitat with a minimum buffer of 220 to 250 feet from any midden. The observatory permittee will bear all costs associated with construction and maintenance of the access road. The road will be maintained to level 3 (see Glossary, Road Maintenance).

2. Dust abatement could be accomplished near telescope facilities using materials agreed to by the Forest Service.

Revised Forest Plan Direction

None

Rationale for Change(s)

The 1986 recommended/proposed special area was designated in 1989 under the Arizona-Idaho Conservation Act. The site and associated activities are currently managed under a special use permit.

1986 Plan Content

3. Close, drain, and revegetate all unneeded roads as they are identified. Funding will be provided by the observatory permittee to the extent closures provide additional habitat for the red squirrel. (page 54-5)

Revised Forest Plan Direction

Same as “Standards and Guidelines- Road Maintenance” for Management Area 1 (p. 144).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The observatory permittee would be notified of schedule, size, and location of all prescribed fires in the Pinaleño Mountains. (page 54-5)

Revised Forest Plan Direction

None

Rationale for Change(s)

Direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

2. Utilized prescribed fire to reduce risk from wildfire and enhance wildlife values with emphasis on red squirrel habitat. Allow fire to assume its natural role in wilderness. (page 54-5)

Revised Forest Plan Direction

OBJ for the Pinaleño EMA: Every 10 years treat the vegetation using wildland fire (planned and unplanned ignitions), prescribed cutting, and mastication on at least 25 percent of the Pinaleño Ecosystem Management Area to create resiliency to disturbances. Treatments will be consistent with the objectives for forestwide vegetation communities and resources. (page 156)

GDs for Pinaleño EMA (page 156): Within habitat for Mount Graham red squirrel:

- Red squirrel habitat needs should supersede the needs of all other species of plants and animals.
- Vegetation treatments should be designed and implemented to avoid disturbance of Mount Graham red squirrel middens.

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

3. The management area is within fire suppression zone 1. (See Glossary, Fire Zone 1) (page 54-5)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 54-5)

1. With the wilderness, outbreaks of insects and disease will be controlled using integrated pest management concepts when there is a clear and imminent danger to other values outside wilderness.

2. Within other areas, outbreaks of insects or disease will be controlled using integrated pest management concepts when there is a significant danger to the vegetation needed to sustain habitat for the Mt. Graham red squirrel and astronomical research activities.

Revised Forest Plan Direction

Same as “Standards and Guidelines- Insect and Disease Management” for Management Area 1 (p. 147).

Rationale for Change(s)

Redundant with FW direction.

Management Area 2B

Dispersed Recreation/ Timber Harvest; Wet Canyon Talussnail Area. Management Area 2B provides direction for management of unique plant and animal species found on these designated lands, especially the Wet Canyon talus snail (*Sonorella macrophallus*). Direction allows for dispersed and developed recreation and special uses of Management Area 2B as long as measures are taken to protect the area’s unique resource values. This management area comprises 220 acres (less than 1 percent of the national forest) in the Pinaleño Mountains, including the Wet Canyon watershed downstream to the mouth of Twilight Creek but not Twilight Creek or its watershed. All acres are unsuitable for timber production.

Management Emphasis and Intensity

1986 Plan Content

(page 54-6)

Manage to perpetuate the unique wildlife and vegetative species, in particular the Wet Canyon talussnail, present within the management area.

Provide for an increase in habitat stability for the Wet Canyon talussnail, while allowing for other uses in the area.

Dispersed and developed recreation activities and other uses will be allowed to the extent they do not degrade the unique values of the management area.

Facilities may be allowed and maintained as long as the unique resource values are protected.

Revised Forest Plan Direction

Management Area 2B is reclassified as predominantly the Wet Canyon Talussnail Zoological Area (1,218 acres). Designated under a 1988 forest plan amendment, the Wet Canyon Talussnail Zoological Area occurs on the eastern slope of the Pinaleño Mountains and protects and emphasizes management of this species and its habitat. Following is key direction for these areas and resources.

DCs for the Pinaleño EMA (pages 155 and 156) :

- The Wet Canyon watershed provides habitat for the Wet Canyon talussnail.
- Recreational uses or management activities do not degrade these special habitats.
- DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas:
- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.

- Each special area provides an example of one or more unique features within the Coronado National Forest. Scenic conditions are natural, unaltered, and wholly intact.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.
- These areas contain unique or significant animals, animal groups, or animal communities, habitat, location, life history, ecology, environment, rarity, or other features.
- Recreation facilities are generally not suitable in the Wet Canyon Talussnail Zoological Area (revised plan, chapter 5).

Rationale for Change(s)

Intent of decisions carried forward but generally revised as broader direction.

Management Area Description and Capability Area Types

1986 Plan Content

(page 54-6)

Located in the Pinaleño Mountain Range, this management area includes the Wet Canyon watershed downstream to the mouth of Twilight Creek, but does not include Twilight Creek or its associated watershed.

Capability Area Types: 6, 9A, 9BC, and 12

Total acres = 1,220

Revised Forest Plan Direction

As noted above, Management Area 2b is reclassified as predominantly the Wet Canyon Talussnail Zoological Area (1,218 acres). See above for key direction for this special management area.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

(page 54-6)

Timber Suitability: All acres unsuitable

Vegetation manipulation is limited per standards and guidelines that follow.

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

However, timber harvest for the purpose of ecosystem restoration is generally a suitable use in the Wet Canyon Talussnail Zoological Area (table 14, page 167)

MA for the Pinaleño EMA: Considering mesic microenvironments for woodland and talussnails endemic to the Pinaleño Ecosystem Management Area (e.g., trees near rocky features, islands of shrubs within talus slopes, riparian colluvia, large logs, scattered rocks on shady hillsides) when doing vegetation treatments. (page 157)

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 54-6)

1. Manage the following acres at the indicated Visual Quality Objectives:

1,220 acres Partial Retention

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Revised as broader direction.

Standards and Guidelines- Recreation Management

1986 Plan Content

1. During periods of fire closure, the Wet Canyon Picnic Area will be closed to campfires. (page 54-6)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by existing policy and guidance for fire management. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Open trails will be identified and signed. Non-system trails will be closed. Eliminate direct trail impact in talus snail habitat as soon as possible. (page 54-6)

Revised Forest Plan Direction

DCs for the Pinaleño EMA (pages 155 and 156):

- The Wet Canyon watershed provides habitat for the Wet Canyon talussnail.
- Recreational uses or management activities do not degrade these special habitats.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Direction provided by existing policy and guidance for fire management. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

3. Use existing water system at Arcadia Campground to supply drinking water to Wet Canyon Picnic Area, as needed. (page 54-6)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level.

1986 Plan Content

4. Provide a "visitor information sign" at the loop trail presenting information about the floral and faunal components within Wet Canyon with emphasis on the stream and riparian complex. (page 54-6)

Revised Forest Plan Direction

MA for the Pinaleño EMA: Using education to improve understanding of special management areas. (page 157)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

1986 Plan Content

1. Inventory and map the riparian area in Wet Canyon using current Forest Service and Arizona Game and Fish Department standards. Document riparian conditions and occupied talus snail habitats to serve as a baseline for future monitoring activities. Complete by end of FY 99. (page 54-6)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level.

1986 Plan Content

2. Conduct an aquatic macroinvertebrate survey of Wet Canyon to document biodiversity. Identify possible species to track aquatic health trends. Complete by end of FY99 to establish baseline information. (page 54-6)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level.

Standards and Guidelines- Range Management

1986 Plan Content

1. Manage the rangeland at Level A (i.e. no grazing) (page 54-6)

Revised Forest Plan Direction

The Wet Canyon Talussnail Zoological Area is generally not suitable for livestock grazing (appendix E).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan.

Standards and Guidelines- Watershed and Soils

1986 Plan Content

1. Maintain satisfactory watershed condition. (page 54-6)

Revised Forest Plan Direction

DC for the Pinaleño EMA: Watersheds provide high quality surface and ground water flows. (page 156)

Rationale for Change(s)

Decision carried forward.

1986 Plan Content

2. Submit an "Application for Permit" for an instream water right on Wet Canyon Creek by the end of FY 99. Monitor discharge in Wet Canyon to establish hydrographic baseline by the end of FY 20. Monitoring procedures to be developed by the Forest Hydrologist. (page 54-6)

Revised Forest Plan Direction

MA for the Pinaleño EMA: Acquiring and maintaining instream water rights on Wet Canyon Creek. (page 157)

An application has been submitted for instream water flow rights in Wet Canyon.

Rationale for Change(s)

Decision carried forward and partially implemented.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Common materials may not be removed for any purpose. As needed, recommend withdrawal from mineral entry and mineral leasing for the entire Management Area. Issue "no surface occupancy" stipulations for mineral leasing activities within the Management Area. (page 54-6)

Revised Forest Plan Direction

Same as direction for minerals management in Management Area 2 (p. 162), and direction related to withdrawals in Management Area 2a (p. 183).

Energy development is generally not a suitable use in the Wet Canyon Talussnail Zoological Area (table 18, page 172).

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Road Management

1986 Plan Content

1. Give full consideration to the habitat and movement needs of the talussnail if Highway 366 road crossing at Wet Canyon is upgraded. Road construction or reconstruction projects should be designed to eliminate further habitat fragmentation (e.g. use a bridge or arched culvert over Wet Canyon crossing). Other proposals for improvement will be evaluated in terms of their potential indirect impacts to the talussnail from increased public access and use of the area. (page 54-7)

Revised Forest Plan Direction

DCs for the Pinaleño EMA (page 156):

- The Wet Canyon watershed provides habitat for the Wet Canyon talussnail.
- Recreational uses or management activities do not degrade these special habitats.

FW MA for Motorized Transportation System: Conducting road maintenance activities with the priorities of maintaining public access, protecting the road investment, protecting other resources, user safety, and user economy. (page 76)

Motorized access is generally a suitable use in this area (table 14, page 167)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Fire Management

1986 Plan Content

(page 54-7)

1. Wet Canyon is within Fire Suppression Zone 1 (i.e. immediate suppression action to protect high value resources).

2. Evaluate fuel loading situation and prescribe actions that reduce potential fire hazards related to talussnail protection.

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

GD for the Pinaleño EMA: Planned and unplanned ignitions should be used to reduce the risk of uncharacteristic wildfires that can cause sedimentation, diminished water quality, and soil erosion in talussnail habitat. (page 156)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

1. Manage ecosystem health to prevent catastrophic impacts to talussnail habitat from insects and disease. (page 54-7)

Revised Forest Plan Direction

Same as “Standards and Guidelines- Insect and Disease Management” for Management Area 1 (p. 147).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Talussnail Research

1986 Plan Content

1. Encourage scientific investigation of talussnail reproduction, recruitment, mortality, population trends, ecology, etc. Encourage investigation of the talussnail species within the group Sonorella in the Pinaleno Mountains. (page 54-7)

Revised Forest Plan Direction

MA for the Pinaleño EMA: Encouraging scientific investigation of talussnail life history traits (including reproduction, recruitment, mortality, population trends, ecology, and so forth) to increase understanding of, and the ability to manage, this unique taxon. (page 157)

Rationale for Change(s)

Best defined as an MA. Management approaches describe the principle strategy the responsible official is inclined to take to meet desired conditions or objectives.

Management Area 3

Dispersed Recreation/ Timber Harvest; Cave Creek Canyon Area. Management Area 3 provides direction related to management of a wide range of recreational activities, including measures to conserve each parcel's unique physical, biological, and cultural resources. This management area comprises 14,772 acres (less than 1 percent of the national forest) of undeveloped grasslands, woodlands, coniferous forest, and riparian areas, none of which is suitable for timber production. Lands designated as Management Area 3 have a wide range of slopes and provide essential habitat for threatened and endangered plants and animals.

Management Emphasis and Intensity

1986 Plan Content

(page 55)

Manage for a variety of dispersed recreation opportunities while protecting or maintaining the unique physical, biological, and cultural resources.

Visual quality objectives will be met.

Other activities should maintain or enhance the recreational opportunities.

Watershed conditions will be improved or maintained.

Cave Creek, outside the South Fork, will be managed with an emphasis on wildlife habitat.

Habitat for species shown under standards and guidelines will be maintained or improved primarily through coordination with other resource activities.

Wildlife oriented recreation is also an important part of the management for dispersed and developed use in Cave Creek.

Revised Forest Plan Direction

Management Area 3 is reclassified as predominantly the proposed **Cave Creek Canyon Birds of Prey Zoological-Botanical Area which completely surrounds the designated South Fork of Cave Creek Zoological-Botanical Area**, both of which are in the Chiricahua EMA. Under the revised forest plan, other management areas that were formerly classified as Management Area 3 include **wild backcountry, developed recreation, and roaded backcountry, and a portion of the Chiricahua Addition North Recommended Wilderness Area.** The Cave Creek Canyon ZBAs emphasize management of a diverse assemblage of migratory and year-round wildlife, as well as the rare riparian setting that attracts these species. Recent research has found that Cave Creek Canyon harbors the United States' densest known population of breeding raptors. Following is key direction for these areas and resources.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Each special area provides an example of one or more unique features within the Coronado National Forest. Scenic conditions are natural, unaltered, and wholly intact.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.
- These areas contain unique or significant animals, animal groups, or animal communities, habitat, location, life history, ecology, environment, rarity, or other features.

DCs for the Chiricahua EMA (page 130):

- The unique resources that provide habitat for the highest number of birds of prey in the U.S. are maintained or enhanced in the Cave Creek Canyon Birds of Prey Zoological-Botanical Area.
- Recreation activities and other uses do not degrade these values.
- Cave Creek and the South Fork of Cave Creek retain the characteristics required to be designated an "outstanding Arizona water" by the Arizona Department of Environmental Quality.

Related to subject LUZs, and 1986 plan decisions regarding visual resources, recreation, watershed management, see direction for management emphasis for Management Area 2 (p. 148).

Rationale for Change(s)

Intent of decisions carried forward but generally revised as broader direction.

Management Area Description and Capability Area Types

1986 Plan Content

Undeveloped grasslands, woodlands, coniferous forest, and riparian areas that have a high attraction to recreationists.

Many are near developed recreation sites and are influenced by the presence of these sites, although not developed themselves. Includes all slope ranges.

Includes known essential habitats for threatened and endangered plants and animals.

Capability Area Types: 1P, 1BM, 5HM, 6P, 6PH, 6BM, 6M, 7P, 7PH, 7BM, 9BHM, and 11AR

Total acres = 14,772

Revised Forest Plan Direction

As noted above, Management Area 3 is reclassified as predominantly the Cave Creek Canyon Birds of Prey Zoological-Botanical Area which completely surrounds the designated South Fork of Cave Creek Zoological-Botanical Area. Under the revised forest plan, other management areas that were formerly classified as Management Area 3 include: wild backcountry, developed recreation, and roaded backcountry, and a portion of the Chiricahua Addition North Recommended Wilderness Area. See above for key direction for this special management area and LUZs.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable (page 55)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

Timber harvest for the purposes of ecosystem restoration is generally suitable in developed recreation, roaded backcountry, and wild backcountry LUZs; but not suitable in wilderness areas (see revised plan, table 14, page 167)

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis.

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Maintain trails to level 3. See appendix E for a definition of levels. (page 55)

Revised Forest Plan Direction

DCs for the Chiricahua EMA (page 130):

- The unique resources that provide habitat for the highest number of birds of prey in the U.S. are maintained or enhanced in the Cave Creek Canyon Birds of Prey Zoological-Botanical Area.
- Recreation activities and other uses do not degrade these values. (page 128)

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

Related to trails management in developed recreation, roaded backcountry, and wild backcountry LUZs, see standards and guidelines for dispersed recreation (trail management) in MA 2 (p. 150).

GD for Recommended Wilderness Areas and Wilderness Study Areas: Wilderness study areas and recommended wilderness areas should be managed to maintain and enhance their wilderness character, which includes scenic resources, primitive recreation settings and fish and wildlife habitats. (page 120)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Revised as broader direction. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. (page 55)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically

authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Motorized access is generally suitable in wild backcountry (limited), developed recreation, and roaded backountry LUZs, but not in wilderness areas. Off-highway-vehicle-focused recreation is generally not suitable in any of these areas (revised plan, table 14, page 167)

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

(page 55)

3. Maintain current Roaded Natural (RN) recreation opportunities while creating increased semi-primitive non-motorized (SPNM) opportunities when possible by closing roads which are determined to be unneeded.

4. Manage dispersed use at a level of 35 percent less than standard and 65 percent standard.

Revised Forest Plan Direction

See above direction for recreation opportunity spectrums in Management Area 2 (page 150)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

5. Initiate or continue environmental education programs in Sabino, Madera, and Cave Creek Canyons. (page 55)

Revised Forest Plan Direction

FW DC for Recreation: Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values. (page 77)

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 55)

1. Manage the following acres at the indicated Visual Quality Objectives:

- 8,125 acres Retention (55 percent)
- 3,988 acres Partial Retention (27 percent)
- 2,659 acres Modification (18 percent)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact. (page 105)

Related to visual resource management in other management areas, see direction for visual resource management in Management Area 2 (p. 154).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Trail Construction and Reconstruction

1986 Plan Content

(page 55)

1. Construct trailhead facility as follows:

- Period 4 - Construct an unpaved trailhead parking lot with two unit vault toilet as appropriate.

Revised Forest Plan Direction

See FW direction for facilities management (p. 126).

Rationale for Change(s)

Overly prescriptive at the forest plan level.

Standards and Guidelines- Wildlife Practices

1986 Plan Content

(page 56)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed threatened and endangered plants and animals and work toward delisting.

(2) In fuelwood stands, maintain 80 percent or more of occupied habitat (compared to untreated stands) for primary and secondary cavity nesters. In other areas, maintain 100 percent of occupied habitat for these species.

(3) As part of allotment management planning, complete riparian management plans by the second period.

(4) Maintain or improve current levels of occupied habitat for:

- Apache fox squirrel
- white-tailed deer
- mule deer
- javelina
- pronghorn
- cottontail
- raptors
- Mearn's quail
- Merriam's turkey
- coppery-tailed trogon
- sulphur-bellied flycatcher
- beardless flycatcher
- thick-billed kingbird
- Bell's vireo
- blue-throated hummingbird
- Arizona ridge-nosed rattlesnake
- Mexican stoneroller
- Gila topminnow
- Sonora chub
- Gila chub
- Arizona trout

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Wildlife Habitat Maintenance

1986 Plan Content

(page 56)

1. Maintain wildlife structures based on guidelines as shown in the Forestwide prescription. The objective is to maintain current levels of occupied habitat for species listed above.

Structural and nonstructural habitat improvements will be based on guidelines as shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Improve quality of forage for:

- white-tailed deer
- mule deer
- pronghorn
- Merriam's turkey
- Gould's turkey

(2) Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and Memoranda of Understanding. Also improve Federally endangered species habitat following these same guidelines.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

(page 57)

1. Manage suitable rangeland at Level A (no livestock), Level B (some livestock), Level C, and Level D. See appendix C for definitions of range management levels.

Range Management Levels

Level	Acres
A	716
B	4,840

Level	Acres
C	2,395
D	6,821

Manage controls livestock numbers so that livestock use if within present grazing capacity. Improvements are constructed to the extent needed to protect and maintain the other resources in presence of grazing. Riparian areas in Cave Creek are grazed only during period November 1 to June 30. No grazing in Madera Canyon and Carr Canyon Reef Area.

Projected Range Condition

Condition	Period 1	Period 5
Satisfactory	14,181	14,181
Unsatisfactory	591	592

Revised Forest Plan Direction

Livestock grazing is generally suitable in subject management areas except for developed recreation LUZ (appendix E).

Rationale for Change(s)

Overly prescriptive at the forest plan level. The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

1. Silviculturally manage the woodland tree resource under uneven-age management with emphasis upon recreation and visual quality. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10 percent or more. (page 57)

Revised Forest Plan Direction

See direction for timber sale and administration in Management Area 2 (p. 159).

GDs for Recommended Wilderness Areas and Wilderness Study Areas:

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.(page 118)

Timber harvest for ecosystem restoration is generally not suitable in wilderness areas (revised plan, chapter 5).

Rationale for Change(s)

Revised as broader direction. Other direction related to timber harvest and forest products provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

(page 57)

2. The removal of dead or green trees for wood products will by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of overmature, mature, poor form, low vigor, or over-crowded trees for the purpose of improving visual quality and improving or maintaining vegetative and wildlife diversity. Fuelwood harvest will be used to meet wildlife objectives. An old growth component of a minimum average density of 3 to 5 trees per acre will be maintained in intermediate foreground zones of sensitivity 1 and 2 areas.

3. Restrict removal of other vegetation, including beargrass, ocotillo, and cactus to salvage operations.

Revised Forest Plan Direction

MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Encouraging use of forest products through stewardship contracting in lieu of onsite burning or chipping through stewardship contracting.

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

Forest products use is generally suitable in subject management areas (revised plan, chapter 5).

Regarding timber sale and administration, desired conditions and direction for silvicultural management, including standards and guidelines for retention of certain components (e.g., old growth), are prescribed by vegetation community which varies across management areas.

Also see direction above regarding wildlife habitat maintenance.

Rationale for Change(s)

Revised as broader direction. Other direction provided by existing law (e.g., ESA), regulation, and policy (see appendix F). Plan components are prescribed forestwide, across management areas and vegetation communities, and for species or specific resources, to meet desired conditions.

1986 Plan Content

(page 57)

4. Require 100 percent slash treatment immediately following wood harvest or right-of-way clearing activities. Before disposal, consider the need for firewood to supply recreation needs. Where this work is performed, use methods which will not degrade visual quality.

5. Require trees to be cut as close to ground level as practical. Within foreground distance zones of sensitivity level 1 and 2 areas (roads, trails, use areas, and water bodies), the angle of cut will face away from the the direction from which it is potentially viewed.

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 80)

MAs for Forest Products (page 70):

- Making timber and other forest products available for the public either through personal use permits or commercial sales.
- Working with agencies and private organizations to promote forest product use where it is available as a result of forest management activities.
- Encouraging use of forest products through stewardship contracting in lieu of onsite burning or chipping through stewardship contracting.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Project-level decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

(page 58)

1. Restore damaged watersheds to a satisfactory watershed condition.

Watershed treatment is a high priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See appendix D for appropriate activities.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Manage all programs to eliminate or minimize onsite and downstream water pollution. (page 58)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Remove slash and clearing debris from drainages, as needed, whether perennial or ephemeral, so that it is above the high water line. (page 58)

Revised Forest Plan Direction

See direction above related to timber sale and administration.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

4. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects. (page 58)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Water Conservation" (p. 97).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Common materials may be removed to accomplish other resource objectives. (page 58)

Revised Forest Plan Direction

Same as direction for minerals management in Management Area 2 (p. 162).

ST for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Salable minerals extraction will not be allowed. (page 123)

ST for Recommended Wilderness Areas and Wilderness Study Areas: Salable minerals extraction will not be allowed. (page 119)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Special Use Management

1986 Plan Content

1. Require permits for studies involving structures or facilities placed on the Forest or manipulation of surface or plants. (page 58)

Revised Forest Plan Direction

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Special use permits within these areas are inappropriate unless they are related to research for which the area is designated. (page 123)

ST for Research Natural Areas, Research Natural Areas, Botanical, Zoological, and Other Special Areas: Within South Fork of Cave Creek Zoological-Botanical Area and the proposed Cave Creek Canyon Birds of Prey Zoological-Botanical Area, a special use permit is required for any plant or animal collection; a special use permit is required for scientific research that would involve placing anything on National Forest System lands within the proposed zoological-botanical area. (page 131)

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Lands Administration

1986 Plan Content

(page 58)

1. Attempt to acquire private lands that will "fill-in" ownership pattern resulting in more effective management of National Forest lands.

2. Act on all exchange offers that appear to be in the public interest.

Revised Forest Plan Direction

See FW direction for ““Land Classification: Ownership Adjustment” (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Road Maintenance

1986 Plan Content

1. Bring existing roads that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for minimum safety, resource protection, and user comfort. Maintain 50 percent of roads to level 3, 30 percent to Level 4, and 20 percent to level 5. See appendix F for a definition of levels. (page 58)

Revised Forest Plan Direction

See FW direction for “Transportation System Planning: Road Maintenance” (p. 122); and “Dispersed and Developed Recreation and Wilderness: Transportation” (p. 67).

Rationale for Change(s)

Redundant with FW and other direction.

1986 Plan Content

2. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element. (page 58)

Revised Forest Plan Direction

Same as “Standards and Guidelines- Road Maintenance” for Management Area 1 (p. 144).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The management area is divided into fires suppression zones 1 and 2 based on resource protection and cost objectives. See section 5 for definition of zones. (page 58)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

2. Fuel treatment may consist of chopping, broadcast burning, piling and burning, or lopping and scattering. (page 58)

Revised Forest Plan Direction

See FW direction for "Timber Management: Fuelwood and Other Products" (p. 95).

OBJ for Chiricahua EMA: Every 10 years treat the vegetation using wildland fire (planned and unplanned ignitions), prescribed cutting, and mastication on at least 20 percent of the Chiricahua Ecosystem Management Area to create resiliency to disturbances. Treatments will be consistent with the objectives for forestwide vegetation communities and resources. (page 131)

GDs for Chiricahua EMA (page 131):

- During vegetation treatments, considerations of mesic microenvironments for woodland and talussnails endemic to the Chiricahua Ecosystem Management Area (e.g., trees near rocky features, islands of shrubs within talus slopes, riparian colluvia, large logs, scattered rocks on shady hillsides) should be incorporated.
- Management activities involving ground disturbance, vegetation management, or both should incorporate site-specific design features to benefit habitat for, or mitigate impacts to, rare or unique vertebrate, invertebrate and plant populations.

Fuelwood product use is generally suitable in subject management areas except wilderness (revised plan, chapter 5).

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

3. Prescribed fire will be used to reduce fuel hazard and to maintain or improve wildlife habitat and watershed conditions. (page 58)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Also see direction for fire and fuels management for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

4. A project that includes prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives. (page 58)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Fire and Fuels Management" for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

5. Burn slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs. (page 58)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project-level decisions and design criteria will be determined on a site-specific basis.

Management Areas 3A and 3B

Developed Recreation Sites. Under the 1986 plan, Management Area 3A represents recreational developments that existed at the time the plan was adopted. Management Area 3B represents recreational developments that were planned but not completed when the plan was adopted (see proposed action map in the 1986 plan). These management units provide direction for a variety of developed recreation activities, including preservation of each area's unique physical, biological, and cultural resources. These management areas are suitable for, and capable of, supporting developed recreation sites. Combined, they comprise 4,165 acres (less than 1 percent of the national forest) of lands that have an average slope of less than 15 percent.

Management Emphasis and Intensity

1986 Plan Content

(page 59)

Manage for a variety of developed recreation opportunities while mitigating the impact on the unique physical, biological, and cultural resources.

Visual quality objectives will be met.

Other activities will maintain or enhance the recreational opportunities.

Watershed conditions will be improved or maintained.

Revised Forest Plan Direction

Management areas 3A and 3B are reclassified as predominantly developed recreation LUZ. Relevant direction for this management area follows.

DCs for Developed Recreation LUZ (page 101):

- Facilities are in good condition and blend into the forest setting.
- Visitors can enjoy natural settings with a high level of comfort and safety. Roads are well maintained and accommodate all types of vehicles.)

GDs for Developed Recreation LUZ (page 101):

- Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting.
- Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment.

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and across management areas and vegetation communities to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

(page 59)

Lands that are suitable and capable of supporting recreational developments.

Average slopes less than 15 percent.

Capability Area Types: 1P, 4M, 9AHM, 9BHM, 9CHM, 11AR, and 12R

Total acres = 4,165

Revised Forest Plan Direction

As noted above, Management Areas 3A and 3B are reclassified as predominantly developed recreation LUZ. See key direction above.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 59)

1. Manage the following acres at the indicated Visual Quality Objectives:

- 1,882 acres Retention (45 percent)
- 2,083 acres Partial Retention (50 percent)
- 200 acres Modification (5 percent)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (USDA FS 2015c) (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Developed Recreation LUZ: Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment. (page 101)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Developed Recreation

1986 Plan Content

(page 59)

1. Maintain existing public recreation sites at current capacities except as noted in DU 6.

2. Maintain existing organization sites.

3. Continue and expand as needed the Sabino Canyon shuttle system.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

GD for Developed Recreation LUZ: Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting. (page 101)

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others). (page 102)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions. Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

(page 59)

4. Recreation residences, with the exception of those on tenure in the Catalina Mountains and Madera Canyon, will be maintained unless and until a determination has been made that the site involved is needed for a higher priority public purpose.

Prior to the termination, nonrenewal or modification of the special use permits for the Arizona Bible School Organization Camp and the Columbine Summer Home Tract located in the Pinaleno Mountains, the effect of these special use authorizations on the Mt. Graham red squirrel and other threatened or endangered species will be determined.

New construction, alteration, addition, or substantial repair of cabins will be limited to one story on existing foundations and a loft. Sun decks may be authorized.

Revised Forest Plan Direction

OBJ for Special Uses: Phase out permits for isolated cabins and privately owned residences that are not part of the recreation residence program by 2028. (page 84)

MA for Special Uses: Using the policy for management of recreational residences as outlined in the “Architectural Guidelines for Recreation Residences on the Coronado National Forest” (USDA FS 2015a) (the guidelines). Managing items not covered in the guidelines with input from a committee consisting of the district rangers of Douglas, Safford, and Santa Catalina Ranger Districts and the forest supervisor or deputy forest supervisor. (page 86)

GD for Land Ownership Adjustments and Boundary Management: Federal lands offered by the United States in a proposed land exchange should meet one or more of the following criteria: lands with long-term land occupancy commitments, high management and operating costs, do not contribute significantly to achieving management objectives, have minimal benefit to the public, and would not create an isolated non-Federal parcel surrounded by National Forest System lands such as, but not limited to, recreation residence areas and administrative sites. (pages 93 and 94)

DC for the Chiricahua (page 130), Pinaleño (page 155), and Santa Catalina (page 164) EMAs: Recreation residences and the organization camp blend well with the natural landscape and do not expand beyond their authorized footprint.

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

5. Maintain trails to level 4. (page 59)

See appendix E for a definition of levels.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

GD for Developed Recreation LUZ: Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting. (page 101)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

6. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. (page 59)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Motorized access is generally suitable in the developed recreation LUZ. Off-highway-vehicle-focused recreation is generally not suitable in any of these areas, however (see revised plan, chapter 5).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

7. Maintain existing lakes at planned capacities to provide continued fishing opportunities. Allow Sabino Lake in the Sabino Canyon Recreation Area to remain in its present silted-in condition to provide opportunities for wildlife viewing in the invading riparian vegetation. (page 59)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Hunting, fishing, and other wildlife-based recreation activities are encouraged where wildlife populations are flourishing. (page 67)

FW DC for Recreation: Dispersed recreation activities on the Coronado National Forest include hiking, viewing natural features and wildlife, relaxing, driving for pleasure, nature study, picnicking, camping, OHV riding, fishing, and hunting, among others. (page 78)

DC for Santa Catalina EMA: Fishing opportunities at Rose Canyon Lake are available to the public. (page 164)

DC for the Tumacacori EMA: Fishing and boating opportunities are provided at Pena Blanca and Arivaca Lakes. Well maintained visitor facilities (including a boat ramp, lakeshore trail, overnight accommodations, picnic areas, and fishing docks) are available at Pena Blanca Lake. (page 143)

DC for the Huachuca EMA: Parker Canyon Lake provides developed recreation opportunities, including boating, sport fishing, camping, and picnicking. (page 147)

DC for Pinaleño EMA: Riggs Lake and Frye Mesa Reservoir offer opportunities for fishing and other lake-based recreation. (page 155)

Rationale for Change(s)

Revised as desired conditions.

1986 Plan Content

8. Determine need for continued public commercial services in Madera Canyon. (page 59)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Project decisions and needs will be made at the site-specific level.

1986 Plan Content

9. Inspect and maintain existing dams for public safety and recreation opportunities. (page 59)

Revised Forest Plan Direction

None

Rationale for Change(s)

Unclear whether this is a ST or GD. Reiterates existing direction.

1986 Plan Content

10. Manage developed sites at a level of 85 percent less than standard and 15 percent standard depending on site needs and time of year. (page 59)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

GD for Developed Recreation LUZ: Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting. (page 101)

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others). (page 102)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

11. Maintain roads in Sabino Canyon, Pena Blanca Lake, and Rose Canyon to level 5. All other roads will be maintained to level 4. See appendix F for definition of levels. (page 59)

Revised Forest Plan Direction

See FW direction for “Transportation System Planning: Road Maintenance” (p. 122).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

12. Encourage private sector development of campgrounds with facilities such as electricity, sewers, and dump stations on private land. (page 60)

Revised Forest Plan Direction

None

Rationale for Change(s)

Unclear whether this is a ST or GD. Project decisions and needs will be made at the site-specific level.

1986 Plan Content

(page 60)

13. Initiate and continue environmental education programs for Cave Creek, Sabino Canyon, and Madera Canyon.

Emphasize environmental education by considering the following:

(a) Employing interpreters and educators (volunteer or paid).

(b) Construction of nature trails.

(c) Publishing plant and animal guides and visitor etiquette brochures.

(d) Building environmental displays.

(e) Conducting visitor programs.

Revised Forest Plan Direction

FW DC for Recreation: Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values. (page 77)

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

(page 60)

14. Specific standards and guidelines for the Sabino Canyon Recreation Area are:

(a) Prohibit hunting, fishing, and trapping in, and the removal of, native animals and plants for the Sabino Canyon Recreation Area.

(b) Refrain from the introduction of non-native animals or plants into the Sabino Canyon Recreation Area. Through information and education, discourage the public from releasing non-native species in the area.

(c) Study the feasibility of eliminating all species of non-native fishes from the portion of Sabino Creek within the Sabino Canyon Recreation Area and reintroducing the native longfin dace (*Agosia chrysogaster*).

(d) Encourage research to increase available information concerning the flora and fauna of the Sabino Canyon Recreation Area. Emphasis should be on inventory of species present and evaluation of their status.

(e) Continue to prohibit camping, pets, and glass containers in the Sabino Canyon Recreation Area.

(f) Prohibit the possession of, or discharge of, a firearm or any other implement capable of taking life, causing injury, or damaging property within the Sabino Canyon Recreation Area, except that inoperable implements may be transported through the area on designated routes.

Revised Forest Plan Direction

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others) [e.g., Sabino Canyon Recreation Concept Plan]. (page 101)

DCs for the Santa Catalina EMA (page 164):

- In the Sabino Canyon Recreation Area, developed recreation opportunities exist along the roadways, including access to the biologically rich Sabino Creek, and opportunities for dispersed and quiet recreation exist away from the main travel corridors.
- Sabino Creek supports a diverse assemblage of native aquatic species.
- Water based recreational activities do not contribute to the spread of invasive aquatic species.
- Recreational target shooting occurs in safe and well-monitored locations.

MA for the Santa Catalina EMA: Collaborating and working with partner groups such as Sabino Canyon Volunteer Naturalists, the Friends of Sabino Canyon, Sabino Mounted Patrol, and Sabino Canyon Bicycle Patrol. (page 165)

DC for Invasive Species: Infestations of invasive exotic plants do not contribute to the loss of native species or impairment of ecosystem function. Invasive animals are nonexistent or occur in low numbers and do not significantly affect the productivity or sustainability of native wildlife. (page 69)

MA for Invasive Species: Coordinating the integrated pest management approach with the plans and efforts of other Federal, State, and local agencies, nongovernmental organizations, volunteers, partners, and landowners. (page 69)

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

(page 60)

15. Continue the year-round operation at the Mt. Lemmon Ski Area. Facilities will be those necessary to directly support the winter and summer operations. Operations will be limited to the current special use permit area, as amended to include a maintenance and storage facility. The area will be managed for a VQO of Modification.

Revised Forest Plan Direction

DC for Recreation: Special use permits augment the variety of suitable outdoor recreation experiences on the Coronado National Forest. (page 78)

DCs for Special Uses (page 84):

- Special use activities on National Forest System lands provide needed services to communities that cannot be reasonably accommodated on non-Federal lands. These activities supplement and complement services that the Coronado National Forest provides.
- Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use.

Rationale for Change(s)

Revised as broader direction. The site and associated activities are currently managed under a special use permit.

1986 Plan Content

16. Manage the planned Fred Lawrence Whipple Observatory multi-purpose facility to provide adequate public service and access. The trailhead and visitor center will be open 7 days a week yearlong. Interpretive tours of the mountain and observatory facilities will be offered daily by reservation. These things will be done as needed to meet public demand and weather permitting. Smithsonian Institution will provide needed staffing to operate and maintain recreational and interpretive facilities. Forest Service will assist with design and layout of interpretive programs. (page 60)

Revised Forest Plan Direction

DCs for Special Uses (page 84):

- Special use activities on National Forest System lands provide needed services to communities that cannot be reasonably accommodated on non-Federal lands. These activities supplement and complement services that the Coronado National Forest provides.
- Environmental, social, and visual impacts are minimized; the permit area and duration are the minimum necessary to accommodate the use.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. The site and associated activities are currently managed under a special use permit.

Standards and Guidelines- Recreation Site Construction and Reconstruction

1986 Plan Content

1. Table 5 shows the schedule for rehabilitating or upgrading of existing facilities. (page 60)

Revised Forest Plan Direction

See FW direction for facilities management (p. 126).

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

1986 Plan Content

2. Development of new sites will be in accordance with schedule shown in table 4. (page 60)

Revised Forest Plan Direction

MA for Developed Recreation LUZ: Managing these areas in accordance with guidance provided in existing and future plans (such as corridor management plans, recreation concept plans, and others) [e.g., Sabino Canyon Recreation Concept Plan]. (page 102)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to maintain and improve current levels of occupied habitat for appropriate indicator species groups and threatened and endangered species. (page 61)

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 61)

1. Nonstructural habitat improvement will be based on guidelines shown in the Forestwide prescription. The objective is to:

(1) Delist threatened and endangered species following guidelines of approved recovery plans and Memoranda of Understanding.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

(page 61)

1. Manage suitable rangeland at Level A (no assigned capacity for livestock).

Some livestock grazing is permitted for the purpose of reducing the fire hazard from grasses. Some sites may be closed to grazing to meet recreation objectives.

Revised Forest Plan Direction

Livestock grazing is generally not suitable in the developed recreation LUZ (table 14, page 167).

Rationale for Change(s)

Overly prescriptive at the forest plan level. The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

1. Wood gathering in recreation sites will be limited to "dead and down" or standing trees that are a safety hazard and only for use in the area. (page 61)

Revised Forest Plan Direction

See FW direction for “Timber Management: Fuelwood and Other Products” (p. 95).

Use of fuelwood products and traditional use of forest products are generally suitable in the developed recreation LUZ; however, commercial use of forest products is generally not suitable in this management area (table 14, page 167).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats (e.g., Mexican spotted owl and northern goshawk) to protect or retain certain components such as snags.

1986 Plan Content

2. Thin, within visual quality and recreation objectives, to improve fire protection or for site maintenance. (page 61)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible.(page 83)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

Timber harvest for ecosystem restoration is generally suitable in the developed recreation LUZ (table 14, page 167).

Rationale for Change(s)

More explicit direction provided for specific scenery management.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Manage all programs to eliminate or minimize on-site and downstream water pollution. (page 61)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

2. Manage all programs to maintain satisfactory watershed conditions. Watershed treatment is a high priority in this Management Area. See appendix D for appropriate activities. (page 61)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant direction and overly prescriptive at the forest plan level. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Lands Administration

1986 Plan Content

(page 61)

1. Maintain withdrawals of all developed recreation sites and recommend mineral withdrawals for existing sites not already covered.

2. Recommend mineral withdrawals prior to new site construction.

Revised Forest Plan Direction

MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to: Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 94)

Energy development is generally not a suitable use in the developed recreation LUZ (table 18, page 172).

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Transportation System Planning

1986 Plan Content

1. Bring existing roads and trail that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety, resource protection, and user comfort. (page 61)

Revised Forest Plan Direction

FW MA for Motorized Transportation System: Conducting road maintenance activities with the priorities of maintaining public access, protecting the road investment, protecting other resources, user safety, and user economy. (page 76)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

Rationale for Change(s)

Revised as broader direction. Primary direction provided by existing law, regulation, and policy.

Standards and Guidelines- Fire Management

1986 Plan Content

1. The management area is in fire suppression zone 1 based on objectives for resource protection. See section 5 for a definition of zones. (page 61)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 61)

1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be ;made to reduce or prevent damage from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable.

2. Recognize and prevent conditions favorable for insect and disease outbreaks.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

Rationale for Change(s)

Redundant with FW direction.

Management Area 4

Livestock Grazing/ Game Habitat/ Fuelwood Harvest. Lands designated as Management Area 4, which are predominantly desertscrub, grassland, and chaparral on slopes up to 40 percent, make up 1,128,269 acres (63 percent of the national forest). This management area follows direction regarding the sustained harvest of livestock forage and fuelwood as well as maintenance and improvement of wildlife habitat. None of the land in this management area is suitable for timber production. Dispersed recreation is allowed on Management Area 4 lands.

Management Emphasis and Intensity

1986 Plan Content

(page 62)

Manage for a sustained harvest of livestock forage and fuelwood while maintaining and improving game animal habitat.

Fully mitigate the impacts on cultural resources and non-game wildlife habitats.

Visual quality objectives will be met or exceeded.

Dispersed recreation activities may occur except for those that adversely affect the productivity of the land or resources.

Watershed and soil conditions will be improved or maintained.

Revised Forest Plan Direction

Management Area 4 is reclassified as predominantly roaded backcountry and wild backcountry LUZs; recommended wilderness (Ku Chish, Chiricahua Addition North, and Whetstone); and

Wilderness Study Areas (Bunk Robinson, Mount Graham, and Whitmire). Relevant direction for these management areas follows.

FW DC for Range Management: The Coronado National Forest provides forage for grazing in support of domestic livestock production as a viable, sustainable economic activity. (page 90)

DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

GDs for Range Management (pages 91 and 92) :

- Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes.
- Treatments for restoring rangelands should emphasize the use and perpetuation of native plant species.
- Management practices to achieve desired plant communities should consider protection and conservation of known cultural resources, including historical sites, prehistoric sites, and plants of significance to Native American peoples.

FW DC for Animals and Rare Plants: Permitted activities—such as livestock grazing, outfitter guiding, and ecotourism guiding—do not compromise healthy populations of native species, nor do they adversely impact habitat components. (page 67)

Roaded backcountry and wild backcountry LUZs, and recommended wilderness and wilderness study areas are generally suitable for livestock grazing (table 14, page 167).

See FW direction for "Timber Management: Fuelwood and Other Products" (p. 95).

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.

Traditional use of forest products is generally suitable in the subject management areas. Fuelwood product use is generally suitable in the subject management areas except for wilderness areas. (table 14, page 167)

Related to visual resource management, see direction for management emphasis for Management Area 1 (p. 135).

Related to recreation management, see FW direction for dispersed and developed recreation (p. 60).

FW DC for Watersheds: Watersheds on the Coronado National Forest are functioning properly or moving toward functioning properly. Watersheds are dynamic and resilient, and are capable of responding to natural and human-caused disturbances while maintaining the integrity of their biological and physical processes. (page 57)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and across management areas and vegetation communities to meet desired conditions.

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Management Area Description and Capability Area Types

1986 Plan Content

(page 62)

Lands capable and suitable for fuelwood harvest, livestock grazing, and game habitat management.

Average slopes are 0 to 40 percent.

Includes desert scrub, grassland, chaparral, and woodland vegetative types.

Capability Area Types: 1P, 1BM, 2P, 2PH, 3P, 5H, 5HM, 6P, 6PH, 6BM, 7P, 7PH, and 7BM

Total acres = 1,128,289

Revised Forest Plan Direction

As noted above, Management Area 4 is reclassified as predominantly roaded backcountry and wild backcountry LUZs; recommended wilderness; and wilderness study areas.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 62)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production. (page 170)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.

Timber harvest for the purposes of ecosystem restoration is generally suitable in roaded backcountry and wild backcountry LUZs; but not suitable in wilderness areas (table 14, page 167).

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Maintain 25 percent of trails to level 2 and 75 percent to level 3. See appendix E for definition of levels. (page 62)

Revised Forest Plan Direction

Same as direction for dispersed recreation (trail maintenance) in Management Area 1 (p. 138).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. (page 62)

Revised Forest Plan Direction

Same as direction for dispersed recreation (motorized use) in Management Area 1 (p. 138).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689).

1986 Plan Content

3. Maintain existing ROS class composition, except if any existing roads are determined to be unneeded, close them to create more opportunities for semi-primitive nonmotorized or primitive experiences. (page 62)

Revised Forest Plan Direction

Management emphasis for these areas is described above.

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

MA for Wild Backcountry: Removing roads and temporary facilities when they are no longer needed. (page 100)

Also see guidance below regarding ROS.

Rationale for Change(s)

As noted above, the 1986 management area framework was revised based on administrative and user needs and comments received during the planning process. Plan components are prescribed forestwide and in management areas to meet desired conditions.

1986 Plan Content

4. Manage dispersed recreation use at less than standard. (page 62)

Revised Forest Plan Direction

Same as direction for dispersed recreation management and ROS in management area 1 (p. 138).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 62)

1. Manage the following acres at the indicated Visual Quality Objectives:

- 135,201 acres Retention (12 percent)
- 406,144 acres Partial Retention (36 percent)
- 440,208 acres Modification (39 percent)
- 146,736 acres Maximum Modification (13 percent)

Revised Forest Plan Direction

Same as direction for visual resources for management area 1 (p. 140).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

(page 62 and 63)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed plant and animal species and work toward delisting.

(2) In fuelwood stands (as compared to an unharvested stand) maintain 80 percent or more of the occupied high density habitat and 60 to 80 percent of the low density habitat for Mearn's quail. Maintain 80 percent or more of the occupied habitat for cavity nesters.

(3) Outside fuelwood areas, maintain 100 percent of occupied habitat for quail and cavity nester species.

(4) Maintain or improve current levels of occupied habitat for:

- mule deer
- white-tailed deer
- javelina
- desert bighorn sheep
- pronghorn
- cottontail
- white-sided jackrabbit
- black bear
- raptors
- Merriam's turkey
- Gould's turkey
- scaled quail
- Gambel's quail
- waterfowl
- Baird's sparrow
- Arizona ridge-nosed rattlesnake
- twin-spotted rattlesnake
- western massassauga
- Gila topminnow

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Wildlife Habitat Maintenance

1986 Plan Content

(page 63)

1. Maintain wildlife structures based on guidelines shown in Forestwide prescription. The objective is to maintain current levels of occupied habitat for:

- mule deer
- white-tailed deer
- javelina
- desert bighorn sheep
- pronghorn
- cottontail
- black bear
- Merriam's turkey
- scaled quail
- Gambel's quail
- waterfowl
- Gila topminnow

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 63)

1. Structural and nonstructural habitat improvements projects will be based on guidelines in the Forestwide prescription. They are intended to meet the following objectives:

(1) Improve quality and availability of forage and availability of water for commonly hunted species:

- mule deer
- white-tailed deer
- javelina
- desert bighorn sheep
- pronghorn

(2) Maintain horizontal and vertical plant diversity at current levels.

(3) Delist threatened and endangered species and reoccupy historical habitat with other identified species following guidelines in approved species recovery plans and Memoranda of Understanding.

(4) Maintain and improve current nesting habitat for endangered species as directed by approved recovery plans.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management and Range Improvement

1986 Plan Content

(page 64)

1. Manage suitable rangeland as follows: See appendix C for definition of range management levels.

Range Management Levels:

B Grassland and chaparral- 134,264 acres

C Grassland- 239,599 acres

D Grassland and woodland- 754,876 acres

Projected Range Condition

Range Condition	Period 1	Period 5
Satisfactory	932,599 acres	1,072032 acres
Unsatisfactory	196,180 acres	56,437 acres

Revised Forest Plan Direction

Roaded backcountry, wild backcountry, and recommended wilderness areas are generally suitable for livestock grazing (appendix E).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in

this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Range Management

1986 Plan Content

2. Develop proper grazing systems to insure renewal of desired vegetative species for livestock forage, big and small game habitat, and to improve soil and water resources. (page 64)

Revised Forest Plan Direction

See above direction for management area emphasis.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

3. Grazing intensity, utilization standards, and kinds and numbers of livestock will vary depending on the particular allotment and will be based on the physiological needs of the forage plants. Attempt to achieve efficient use of full capacity range. (page 64)

Revised Forest Plan Direction

See FW direction for range management (p. 93).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

4. Structural and nonstructural improvements should receive high priority in these areas as needed for the desired level of management. (page 64)

Revised Forest Plan Direction

Same as above direction for structural improvements.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

5. Vegetative manipulation will be used for range forage improvement and may consist of such activities as prescribed burning, mechanical removal, wood harvest, use of approved herbicides, livestock grazing, and reseeding of native or non-native species. See appendix C for activity selection criteria. (page 64)

Revised Forest Plan Direction

FW Landscape Scale DC for Vegetation Communities: Vegetative conditions are resilient to the frequency, extent, and severity of disturbances under a changing climate, especially fire. Natural

and human disturbances (e.g., planned and unplanned fire, mechanical vegetation treatments) provide desired overall plant density, structure, species composition, coarse woody debris, and nutrient cycling. Desired disturbance regimes are restored. (page 21)

FW Mid-Scale DC for Vegetation Communities: The composition, density, structure, and mosaic of vegetative conditions minimize the threat of uncharacteristic wildfire hazard to local communities and ecosystems. (page 22)

FW GDs for Vegetation Communities (page 22):

- Only native plant species or short lived, nonpersistent, and nonnative species should be used for mine reclamation purposes or wildfire treatments.
- Management activities should favor the development of native grasses in areas where they have the potential to establish and grow.

See further direction above related to livestock grazing in subject management areas. Also see direction below related to invasive species management.

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

(page 64)

1. Silviculturally manage the woodland tree resource under uneven-age management. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10 percent or more. Manage to sustain an average 40 to 50 year cutting cycle.

2. The removal of dead or green trees for wood products or Christmas trees will by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of overmature, mature, poor form, low vigor, or over-crowded trees for the purpose of maintaining vigorous stands and desired wildlife species.

Revised Forest Plan Direction

DC for Forest Products: Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. (page 70)

STs for Forest Products (page 70):

- Harvesting systems should be selected based on their ability to meet desired conditions and not on their ability to provide the greatest dollar return.
- On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety, or if needed to meet statutory requirements, e.g., mining law. (page 68-69)

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Forest Products: A sustainable supply of wood products (small roundwood, sawlogs, biomass, fuelwood) and other products (Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. Forest products, particularly those related to wood fiber, are made available as part of fuel treatment projects and restoration activities. (page 70)

Timber harvest for the purposes of ecosystem restoration is generally suitable in roaded backcountry and wild backcountry LUZs; but not suitable in wilderness areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction. Desired conditions and direction for silvicultural management, including standards and guidelines for protection of certain components (e.g., old growth), are prescribed by vegetation community which varies across management areas. Other direction related to timber harvest and forest products provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Use fuelwood sales to accomplish other management objectives such as fuel hazard reduction, visual quality enhancement, and range management. (page 65)

Revised Forest Plan Direction

See direction above regarding management area emphasis and fuelwood products and management.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

4. Prohibit the removal of saguaro cactus, agave, yucca, and ironwood wildings unless it becomes necessary to remove these in order to accommodate a use of higher priority. The harvest of beargrass, ocotillo, and most cactus species will be permitted as long as there is no significant impact on other resources or uses. (page 65)

Revised Forest Plan Direction

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

Forest products use is generally suitable in subject management areas, except for wilderness areas. However, traditional uses of forest products is generally unsuitable in wilderness areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Restore damaged watersheds to a satisfactory watershed condition. Watershed treatment is a high priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See appendix D for appropriate activities. (page 65)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Manage all programs to eliminate or minimize onsite and downstream water pollution. (page 65)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Provide, to the extent possible, conservation pools and minimum streamflows in authorizing or developing water storage impoundments and diversion projects. (page 65)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Water Conservation" (p. 97).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Common materials for personal or commercial use will require a permit. Attempt to locate borrow areas in places that would enhance resources or facilities. (page 65)

Revised Forest Plan Direction

Same as direction for minerals management in Management Area 2 (p. 162).

ST for Recommended Wilderness Areas and Wilderness Study Areas (page 119) and Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123): Salable minerals extraction will not be allowed.

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Lands Administration

1986 Plan Content

1. Act on land exchange offers involving Priority I land and the most desirable Priority II lands to the extent possible. (page 65)

Revised Forest Plan Direction

See FW direction for "Land Classification: Ownership Adjustment" (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Road and Trail Maintenance

1986 Plan Content

1. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for safety and resource protection. Maintain 80 percent of roads to Level 2, 15 percent to Level 3, 3 percent to Level 4, and 2 percent to level 5. See appendix E for a definition of levels. (page 65)

Revised Forest Plan Direction

See FW direction for "Transportation System Planning- road maintenance" (p. 122); and "Dispersed and Developed Recreation and Wilderness- transportation" (p. 67).

Rationale for Change(s)

Redundant with FW and other direction.

1986 Plan Content

2. Close, drain, and revegetate roads and trails that are determined to be unneeded for further use. This should be a cost of the initiating resource element. (page 65)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Road Maintenance" for Management Area 1 (p. 144).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire Management

1986 Plan Content

1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See section 5 for a definition of zones. (page 65)

Revised Forest Plan Direction

None

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Fuels Management

1986 Plan Content

(page 65)

1. Reduce slash from fuelwood harvest to a level that is compatible with Forest Service ability to protect the remaining resources.

2. Within foreground distance zones of sensitivity Levels 1 and 1 (trails, roads, use areas, and water bodies) require 100 percent treatment of all slash and debris.

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

1986 Plan Content

3. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering. (page 65)

Revised Forest Plan Direction

See FW direction for "Timber Management: Fuelwood and Other Products" (p. 95).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats to protect or retain certain components (e.g., snags).

1986 Plan Content

(page 66)

4. Prescribed fire will be used to reduce fuel hazard and enhance wildlife habitat and improve range conditions.

5. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within the established boundaries and that the burning meets the desired resource objectives.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Fire and Fuels Management" for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

6. Burn fuelwood slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs. (page 66)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project-level decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 66)

1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damage from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable.

2. Recognize and prevent conditions favorable for insect and disease outbreaks.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

Rationale for Change(s)

Redundant with FW direction.

Management Area 7, Prescriptions A and B

Unique Resources Including Riparian Areas. As described in the 1986 plan, due to the blending and sometimes indistinct differences between riparian vegetation types, Management Area 7 has been assigned to two distinct prescriptions. The resource manager will have to decide which prescription is appropriate based on the actual ground conditions.

Management Area 7, Prescription A, provides management direction intended to ensure the sustainability of unique plants and wildlife in the management area, and to improve and manage riparian areas for the benefit of riparian-dependent resources. Dispersed recreation activities and other specific uses are allowed in this management area, including facilities that protect and conserve each parcel's unique resources. This management area comprises 24,423 acres (1 percent of the national forest) of undeveloped lands that support flora and fauna associations in various riparian ecotypes and deciduous and coniferous forest types, and habitat for threatened and endangered species, each of which is sufficiently unique to require special management. None of the land in this management area is suitable for timber production.

Management Area 7, Prescription B, provides management direction intended to ensure the sustainability of unique plant and animal species and habitat in the management area concurrent with its use for livestock foraging and fuelwood harvest. Management allows recreation activities and other specific uses in this management area, including facilities that protect and conserve each parcel's unique resources. This management area comprises 17, 124 acres (1 percent of the national forest) of undeveloped lands that support flora and fauna associations in non-riparian drainages, such as oak and mesquite bottoms, and habitat for threatened and endangered species, each of which is sufficiently unique so as to require special management. None of the land in this management area is suitable for timber production.

Management Emphasis and Intensity for Mgmt Area 7A

1986 Plan Content

(page 67)

Manage to perpetuate the unique wildlife or vegetative species.

Improve and manage riparian areas (as defined by FSM 2526 – Riparian Watershed Management) to benefit riparian dependent resources.

Dispersed recreation activities and other uses may be allowed to the extent they do not degrade the unique values.

Facilities may be allowed and maintained for the purpose of protecting these resources.

Visual quality objectives will be met.

Revised Forest Plan Direction

Management Area 7 is reclassified as predominantly **roaded backcountry and wild backcountry LUZs**. Relevant direction for these management areas follows.

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

FW DC for Range Management: Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes. (page 91)

Related to recreation management, see FW direction for dispersed and developed recreation (p. 60).

See FW direction for facilities management (p. 126).

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DCs for Wild Backcounty LUZ (page 99):

- The wild undeveloped character of these areas is preserved. Settings are natural, and the sights and sounds of motorized vehicles are infrequent along roads and nonexistent in unroaded areas.
- Opportunities for solitude and quiet recreation are readily found.
- Visitors are able to explore and discover remote portions of the Coronado via primitive back-country motorized routes.
- Quiet experiences are available in this entire zone, with the exception of areas directly adjacent to the small number of access roads.

GDs for Wild Backcountry LUZ (page 99):

- Recreation opportunity spectrum classes in this land use zone should be primitive, semiprimitive nonmotorized, and semiprimitive motorized except in areas where the recreation setting is influenced by motorized access in adjacent land use zones or by private inholdings.
- Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map.

DCs for Roaded Backcountry LUZ:

- Recreation opportunity spectrum classes in this land use zone are semiprimitive nonmotorized, semiprimitive motorized, roaded modified, and roaded natural except where there are small, remote administrative sites, developed recreation sites, and permitted facilities. (page 100)

GDs for Roaded Backcountry LUZ (page 100):

- The level and type of development should be limited in order to protect the natural character inherent in this zone.
- Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map. (page 98)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions.

Management Emphasis and Intensity for Mgmt Area 7B

1986 Plan Content

(page 67)

Manage to perpetuate the unique wildlife or vegetative species while producing livestock forage and fuelwood on a sustained basis.

Recreation activities and other uses may occur to the extent they do not degrade the unique values

Visual quality objectives will be met.

Facilities may be allowed and maintained for the purpose of protecting these resources.

Revised Forest Plan Direction

Same as direction above for management emphasis in Management Area 7A. Fuelwood direction is addressed in table 14, page 167.

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

(page 67)

Undeveloped lands that have been identified as supporting flora and fauna associations that are unique enough to require special management practices.

Includes identified riparian ecotypes.

Includes deciduous and coniferous forest types.

Includes known essential habitats for threatened and endangered plants and animals.

Management Area 7A Capability Area Types: 8M, 9AHM, 9BHM, 11AR, and 12R

Total acres = 24,423

Management Area 7B Capability Area Types: 10R and 11BR

Total acres = 17,124

Revised Forest Plan Direction

As noted above, Management Areas 7A and 7B are reclassified as predominantly roaded backcountry and wild backcountry LUZs. See key direction and management emphasis information above.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 67)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production. (page 170)

FW GD for Riparian Areas:

- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis.

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Maintain trails to level 3. See appendix E for a definition of levels. (page 67)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

FW MAs for Recreation (pages 79 and 80):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.
- Implementing a sustainable recreation approach consistent with the "Coronado National Forest Sustainable Recreation Action Plan" (USDA FS 2015d).

GD for Wild Backcountry LUZ: New roads or motorized trails should be allowed only as needed to restore motorized public access to National Forest System land, or for resource protection. (page 99)

GD for Roaded Backcountry LUZ: The level and type of development should be limited in order to protect the natural character inherent in this zone. (page 100)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

2. Use of motorized vehicles is restricted to existing trails and roads. Some trails may be closed to motorized vehicles for safety, resource protection, and user conflict reasons. All trails on the Santa Catalina Ranger District are closed to motorized vehicles. (page 67)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Motorized access is generally suitable in wild backcountry (limited) and roaded backcountry LUZs. Off-highway-vehicle-focused recreation is generally not suitable either area, however (see revised plan, chapter 5).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

(page 67)

3. Maintain current roaded natural (RN) recreation opportunities while creating semi-primitive nonmotorized (SPNM) opportunities when possible by closing roads which are determined to be unneeded, and creating temporary roads only for resource utilization projects.

4. Manage dispersed use at a level of 75 percent less than standard and 25 percent standard.

Revised Forest Plan Direction

See above direction for recreation opportunity spectrums in Management Areas 7A and 7B.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 67)

Management Area 7A:

1. Manage the following acres at the indicated Visual Quality Objectives:

- 8,792 acres Retention (36 percent)
- 8,060 acres Partial Retention (33 percent)
- 6,106 acres Modification (25 percent)
- 1,465 acres Max Modification (6 percent)

Management Area 7B:

1. Manage the following acres at the indicated Visual Quality Objectives:

- 6,165 acres Retention (36 percent)
- 5,651 acres Partial Retention (33 percent)
- 4,281 acres Modification (25 percent)
- 1,027 acres Max Modification (6 percent)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

GD for Wild Backcountry LUZ: Scenic resources should be managed so that human activities are minimally visually evident, as per the Coronado National Forest scenic integrity objective map. (page 99)

GD for Roaded Backcountry LUZ: Scenic resources should be managed so that human activities are visually subordinate or blend into the landscape, as per the Coronado National Forest scenic integrity objective map. (page 100)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Wildlife and Fish for Mgmt Area 7A

1986 Plan Content

(page 67)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed plant and animal species and work toward delisting.

(2) In fuelwood stands maintain 90 percent or more of occupied habitat (compared to untreated stands) for primary and secondary cavity nesters. In other areas, maintain 100 percent of occupied habitat for these species.

(3) As part of allotment management planning, complete riparian management plans by the second period.

(4) Maintain or improve current levels of occupied habitat for:

- Apache fox squirrel
- white-tailed deer
- mule deer
- pronghorn
- cottontail
- raptors
- Mearn's quail
- Gould's turkey
- Merriam's turkey
- coppery-tailed trogon
- sulphur-billed flycatcher
- beardless flycatcher
- thick-billed kingbird
- Bell's vireo
- blue-throated hummingbird
- Arizona ridge-nosed rattlesnake
- Mexican stoneroller
- Gila topminnow
- Sonora chub
- Gila chub
- Arizona trout

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction, and some overly prescriptive at the forest plan level. In the revised plan, direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Wildlife and Fish for Mgmt Area 7B

1986 Plan Content

(page 68)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed plant and animal species and work toward delisting.

(2) In fuelwood stands (as compared to unharvested stands) maintain 80 percent or more of the occupied high density habitat and 60 to 80 percent of the low density habitat for Mearn's quail. Maintain 80 percent or more of the occupied habitat for cavity nesters. In other areas, maintain 100 percent of occupied habitat for quail and cavity nester species.

(3) Maintain or improve current occupied levels of habitat for:

- white-tailed deer
- mule deer
- javelina
- pronghorn
- cottontail
- raptors
- Merriam's turkey
- Gould's turkey
- coppery-tailed trogon
- sulphur-billed flycatcher
- beardless flycatcher
- thick-billed kingbird
- Bell's vireo
- blue-throated hummingbird
- Arizona ridge-nosed rattlesnake
- Mexican stoneroller
- Gila topminnow
- Sonora chub
- Gila chub

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction, and some overly prescriptive at the forest plan level. In the revised plan, direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Wildlife Habitat Maintenance

1986 Plan Content

1. Maintain wildlife structures based on guidelines shown in Forestwide prescription. They are intended to maintain current levels of occupied habitat for species listed above. (page 68)

Revised Forest Plan Direction

See FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 68)

1. Structural and nonstructural habitat improvements projects will be based on guidelines as shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Improve quality and availability of forage and water for:

- white-tailed deer
- mule deer
- pronghorn
- Merriam's turkey
- Gould's turkey

(2) Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and Memoranda of Understanding. Also improve habitat for Federally listed plants and animals following these same guidelines.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management for Mgmt Area 7A

1986 Plan Content

1. Manage suitable rangeland at Level D. If level D is not achievable, manage at Level A (no livestock). See appendix C for definition of range management levels. (page 68)

Revised Forest Plan Direction

Roaded backcountry and wild backcountry LUZs are generally suitable for livestock grazing (table 14, page 167).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Range Management and Improvement for Mgmt Area 7B

1986 Plan Content

(page 69)

1. Manage suitable rangeland at Level D. If level D is not achievable, manage at Level A (no livestock). See appendix C for definition of range management levels.

Management seeks full utilization of forage allocated to livestock. Cost-effective management systems and techniques, including fencing and water development, are designed and applied to obtain relatively uniform livestock distribution and use of forage and to maintain plant vigor.

Projected Range Condition

Range Condition	Period 1	Period 5
Satisfactory	15,412 acres	15,412 acres
Unsatisfactory	1,712 acres	1,712 acres

Revised Forest Plan Direction

Same as rangeland suitability direction above for Management Area 7A.

FW DC for Range Management: Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes. (page 91)

Also see other direction above related to structural and nonstructural improvements in Management Areas 7A and 7B.

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits, needs, and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Range Management for Mgmt Area 7A

1986 Plan Content

2. Vegetative manipulation is not used for range improvement. (page 69)

Revised Forest Plan Direction

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

FW GDs for Riparian Areas:

- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 53)

FW DC for Range Management: Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes.(page 91)

Rationale for Change(s)

Revised as broader direction. Project decisions, needs, and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Range Management for Mgmt Area 7B

1986 Plan Content

2. Vegetative manipulation may be used for range improvement and may consist of such activities as prescribed burning, mechanical removal, wood harvest, use of approved herbicides, livestock grazing, and reseeding of native or non-native species. See appendix D for activity selection criteria. (page 69)

Revised Forest Plan Direction

FW Landscape Scale DC for Vegetation Communities: Vegetative conditions are resilient to the frequency, extent, and severity of disturbances under a changing climate, especially fire. Natural and human disturbances (e.g., planned and unplanned fire, mechanical vegetation treatments) provide desired overall plant density, structure, species composition, coarse woody debris, and nutrient cycling. Desired disturbance regimes are restored. (page 21)

FW Mid-Scale DC for Vegetation Communities: The composition, density, structure, and mosaic of vegetative conditions minimize the threat of uncharacteristic wildfire hazard to local communities and ecosystems. (page 22)

FW GDs for Vegetation Communities (page 22):

- Only native plant species or short lived, nonpersistent, and nonnative species should be used for mine reclamation purposes or wildfire treatments.
- Management activities should favor the development of native grasses in areas where they have the potential to establish and grow.

See further direction above related to range management in subject management areas.

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Timber Sale Preparation and Administration for Mgmt Area 7A

1986 Plan Content

1. Restrict removal of vegetation, such as beargrass, agave, yucca, ocotillo, and cactus to salvage operations and to remove invading species.

Revised Forest Plan Direction

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

FW DC for Forest Products: A sustainable supply of wood products (small roundwood, sawlogs, biomass, fuelwood) and other products (Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. (page 70)

Forest products use is generally suitable in subject management areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Timber Sale Preparation and Administration for Mgmt Area 7B

1986 Plan Content

3. Prohibit the removal of saguaro cactus, agave, yucca, and ironwood wildings unless it because necessary to remove them in order to accommodate a use of higher priority. The harvest of beargrass, ocotillo, and most cactus species will be permitted as long as there is no significant impact of other resources or uses. (page 69)

Revised Forest Plan Direction

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

FW DC for Forest Products: A sustainable supply of wood products (small roundwood, sawlogs, biomass, fuelwood) and other products (Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. (page 70)

Forest products use is generally suitable in subject management areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

1. Silviculturally manage the woodland tree resource under uneven-age management. Fuelwood harvest will be limited to those lands which contain fuelwood species having a crown cover of 10 percent or more. Manage to sustain an average 40 to 50 year cutting cycle. The removal of dead or green trees for wood products or Christmas trees will be by individual tree selection or group selection limited to maximum clearing size of two acres. Harvest will be restricted to removal of overmature, mature, poor form, low vigor, or over-crowded trees for the purpose of maintaining vigorous stands and sustaining the yield of wood products while maintaining the unique values of the area. (page 69)

Revised Forest Plan Direction

DC for Forest Products: Results of silvicultural treatments reflect natural disturbance regimes and contribute to ecosystem sustainability. (page 70)

STs for Forest Products (page 70):

- Harvesting systems should be selected based on their ability to meet desired conditions and not on their ability to provide the greatest dollar return.
- On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety, or if needed to meet statuatory requirements, e.g., mining law.

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

FW GDs for Riparian Areas:

- Vegetation treatments should favor the retention of snags, large diameter woody debris, and/or growth of large riparian trees along stream channels. (page 52)

Timber harvest for the purposes of ecosystem restoration is generally suitable in roaded backcountry and wild backcountry LUZs (table 14, page 167).

Rationale for Change(s)

Revised as broader direction. Desired conditions and direction for silvicultural management, including standards and guidelines for protection of certain components (e.g., old growth), are prescribed by vegetation community which varies across management areas. Other direction related to timber harvest and forest products provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

2. Use fuelwood sales to accomplish other management objectives such as hazard reduction, visual quality enhancement, and wildlife habitat improvement. In Management Area 7A, harvest will be limited to individual tree selection. (page 69)

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

SD for Forest Products: On lands classified as not suited for timber production, timber harvesting should only be used for making progress toward desired conditions or for salvage, sanitation, public health, or safety. (page 70)

FW DC for Forest Products: A sustainable supply of wood products (small roundwood, sawlogs, biomass, fuelwood) and other products (Christmas trees, beargrass, cactus, ferns, and fungi) are provided within the capacity of the land to produce these goods. (page 70)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement in Mgmt Area 7A

1986 Plan Content

1. Restore damaged watersheds to satisfactory watershed condition. Watershed treatment is a high priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization and revegetation using native or non-native species. See appendix D for appropriate activities. (page 69)

Revised Forest Plan Direction

Same as “Standards and Guidelines- Watershed and Soil Maintenance and Improvement” under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement in Mgmt Area 7B

1986 Plan Content

1. Watershed treatment is a high priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization, activities to increase water infiltration, and revegetation using native or non-native species. See appendix D for activity selection criteria. (page 69)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

2. Manage all programs to eliminate or minimize onsite and downstream water pollution. (page 69)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Consider mineral withdrawals as needed to protect essential habitats for threatened and endangered species. (page 69)

Revised Forest Plan Direction

MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to: Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 95)

FW GD for Animals and Rare Plants: Activities occurring within federally listed species habitat should apply habitat management objectives and species protection measures from approved recovery plans and signed conservation agreements. (page 67)

Rationale for Change(s)

Revised as FW direction. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Lands Administration

1986 Plan Content

(page 69)

1. Attempt to acquire private lands that will "fill-in" ownership pattern resulting in more effective management of National Forest lands.

2. Act on all exchange offers that appear to be in the public interest.

Revised Forest Plan Direction

See FW direction for “Land Classification: Ownership Adjustment” (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Road and Trail Planning and Maintenance

1986 Plan Content

1. Attempt to avoid these areas with new road and trail development. (page 69)

Revised Forest Plan Direction

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

FW GDs for Motorized Transportation System (page 75):

- New road construction in meadows and wetlands should be avoided where physically or financially feasible. If these activities are unavoidable, they should be designed and implemented to minimize effects to waterflow, wetland recharge, and ecosystem function.
- Construction of roads across highly erodible soils and areas of high and very high scenic integrity should be avoided.

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

2. Bring existing roads and trails that are to be retained on the system to a maintainable standard which is suitable for the planned use and provides for minimum safety and resource protection. Maintain roads to Level 2. See appendix E for a definition of levels. (page 69)

Revised Forest Plan Direction

See FW direction for "Transportation System Planning: Road Maintenance" (p. 122); and "Dispersed and Developed Recreation and Wilderness: Transportation" (p. 67).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

3. Close, drain, and revegetate existing roads that are determined to be unneeded for further use. This should be a cost of the initiating resource element. (page 70)

Revised Forest Plan Direction

FW DCs for Motorized Transportation (pages 74 and 75):

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion.

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Also see FW direction for "Transportation System Planning: Road Maintenance" (p. 122)

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The management area is divided into fire suppression zones 1 and 2 based on resource protection and cost objectives. See Section 5 for definition of zones. (page 70)

Revised Forest Plan Direction

DC for Riparian: Fire rarely burns through this vegetation type, and fire in the surrounding watershed periodically provides slight increases in sediment and water that cause minimal channel modification. (page 52)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Fire and Fuels Management for Mgmt Area 7A

1986 Plan Content

2. Require 100 percent treatment of all slash and debris within cleared right-of-way boundaries. (page 70)

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Fire and Fuels Management for Mgmt Area 7B

1986 Plan Content

2. Reduce slash from fuelwood harvest and right-of-way clearing to a level that is compatible with Forest Service ability to protect the remaining resources and still provide needed wildlife habitat. (page 70)

Revised Forest Plan Direction

Same as direction above for slash treatment in Management Area 7A.

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Fire and Fuels Management in Mgmt Area 7A

1986 Plan Content

3. Within foreground distance zones of sensitivity Level 1 and 2 (trails and road use areas and water bodies) require 100 percent treatment of all activity slash. (page 70)

Revised Forest Plan Direction

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

4. Fuel treatment may consist of chipping, broadcast burning, piling and burning, or lopping and scattering. (page 70)

Revised Forest Plan Direction

See FW direction for “Timber Management: Fuelwood and Other Products” (p. 95).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats to protect or retain certain components (e.g., snags).

Standards and Guidelines- Fire and Fuels Management in Mgmt Area 7A

1986 Plan Content

5. The prescribed use of fire will be used to reduce fuel hazard and enhance wildlife habitat. (page 70)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Fire and Fuels Management" for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Fire and Fuels Management in Mgmt Area 7B

1986 Plan Content

4. Prescribed fire will be used to reduce fuel hazard and maintain or improve wildlife habitat, livestock forage, and watershed condition. (page 70)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Fire and Fuels Management" for Management Area 1 (p. 145).

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

6. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives. (page 70)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F). Project decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Fire and Fuels Management in Mgmt Area 7A

1986 Plan Content

7. Burn debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs. (page 70)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project-level decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Fire and Fuels Management in Mgmt Area 7B

1986 Plan Content

6. Burn fuelwood slash and debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs. (page 70)

Revised Forest Plan Direction

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing policy, and guidance (see appendix F). Project-level decisions and design criteria will be determined on a site-specific basis.

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 70)

1. Maintain surveillance for insect and disease outbreaks. Where opportunities exist, attempts will be made to reduce or prevent damages from insects and diseases. Use integrated pest management techniques which are compatible, economical, and environmentally acceptable.

2. Recognize and prevent conditions favorable for insect and disease outbreaks.

Revised Forest Plan Direction

Same as "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

GD for Forest Products: Timber harvest activities should be carried out in a manner consistent with maintaining or making progress toward the desired conditions in this plan. (page 70)

Rationale for Change(s)

Redundant with FW direction.

Management Area 8

Research Natural Areas. Management Area 8 is designated for nondisturbing research and education on parcels that have been evaluated and either designated, proposed, or determined to be suitable for designation as a research natural area. This management area comprises 3,805 acres (less than 1 percent of the national forest); none of the parcels in this management area is suitable for timber production. No harvest of forest products or grazing by livestock is allowed in this management area.

Management Emphasis and Intensity

1986 Plan Content

(page 71)

Manage to provide opportunities for nondisruptive research and education.

Use restrictions will be imposed as necessary to keep areas in their climax state.

There will be no harvest of forest products, including fuelwood.

Revised Forest Plan Direction

Management Area 8 is reclassified as predominantly research natural areas and special management areas including the Appleton-Whittell Research Ranch, Butterfly Peak RNA, Elgin RNA, Goudy Canyon RNA, and the proposed Canelo RNA. Relevant direction for these areas follows.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.
- These areas contain unique or significant animals, animal groups, or animal communities, habitat, location, life history, ecology, environment, rarity, or other features.

Forest product use is generally not suitable in research natural areas (see revised plan, chapter 5).

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

(page 71)

Includes those lands that have been determined to be suitable for designation as research natural areas.

Includes the following areas:

Existing RNA

- Butterfly = 1,000 acres
- Goudy Canyon = 370 acres (remainder in Wilderness 8A)
- Elgin = 290 acres
- Goodding (North End) = 7 acres (remainder in Wilderness 8A)

New RNA Proposal

- Canelo = 350 acres
- Goodding (North Extension) = 153 acres

Other

- Research Ranch = 1,635 acres

The Research Ranch will not be designated as an official research natural area but will be managed under a Memorandum of Understanding to meet similar objectives, except some vegetative manipulation will be allowed for research projects.

Capability Area Types: 6P, 6P/H, 6H/M, 9CH/M, and 11AR

Total acres = 3,805

Revised Forest Plan Direction

As noted above, Management Area 4 is reclassified as predominantly research natural areas and special management areas.

Direction related to vegetation manipulation and suitability in these areas is addressed below.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Revised as broader direction, capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 71)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

Timber harvest for the purposes of ecosystem restoration is suitable in the Appleton-Whittell Research Ranch. Timber harvest in research natural areas is suitable only if allowed in the establishment record for the area (table 14, page 167)

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis.

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Maintain 50 percent of trails at level 2 and 50 percent at level 3. See appendix E for a definition of levels. (page 71)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

2. Motor vehicles are not permitted in research natural areas. Within the Research Ranch, use of motorized vehicles is permitted only on designated roads and trails. Some trails may be closed to use by motor vehicles for safety reasons, to eliminate conflicting uses or to further protect resources. (page 71)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions.(page 75)

Motorized access is generally suitable in in the Appleton-Whittell Research Ranch, but not suitable in other research natural areas. Off-highway-vehicle based recreation is generally not a suitable use in research natural areas and other special management areas (table 14, page 167)

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689).

1986 Plan Content

(page 71)

3. Attempt to maintain semi-primitive nonmotorized opportunities that exist within the Research Ranch. If any existing roads are determined to be unneeded, close them to create more opportunities for primitive or semi-primitive nonmotorized experience.

4. Manage dispersed use at less than standard.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 71)

Visual Resource Management

1. Manage the following acres at the indicated Visual Quality Objectives:

   2,170 acres Retention (57 percent RNAs)

   1,635 acres Partial Retention (43 percent Research Ranch)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact.(page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

(page 71)

Wildlife and Fish

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

   (1) Maintain and improve occupied habitat for Federally and State listed animals.

   (2) Maintain or improve current populations of endangered and threatened plants.

Revised Forest Plan Direction

See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 72)

1. Nonstructural habitat improvement projects will be based on guidelines in the Forestwide prescription. They are intended to meet the following objectives:

(1) Delist threatened and endangered species following guidelines of approved recovery plans and memoranda of understanding.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

1. Manage rangeland at Level A (no livestock). Management excludes livestock grazing to protect other values or eliminate conflicts with other uses. (page 72)

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and

soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

Livestock grazing is a suitable use in the Appleton-Whittell Research Ranch; and is suitable in research natural areas only where there are established livestock grazing allotments (table 14, page 167)

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

(page 73)

1. Watershed treatment is a low priority in this Management Area. If treatment is appropriate, activities are described in appendix B.

2. These areas will be monitored for watershed condition trends in relic areas.

Revised Forest Plan Direction

Same as “Standards and Guidelines- Watershed and Soil Maintenance and Improvement” under Management Area 1 (p. 143).

Rationale for Change(s)

Redundant direction, and overly prescriptive at the forest plan level. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. There will no removal of mineral materials. (page 73)

Revised Forest Plan Direction

ST for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Salable minerals extraction will not be allowed. (page 123)

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

(page 73)

2. Maintain withdrawals from mineral entry for all areas.

3. Recommend withdrawals from mineral entry for new areas.

4. No surface occupancy for leasable minerals.

Revised Forest Plan Direction

MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to: Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 94)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

Energy development is generally not a suitable use in research natural areas and other special management areas (table 18, page 172).

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Road Maintenance

1986 Plan Content

1. Bring existing roads that are to be retained on the system to a maintenance standard which is suitable for the planned use and provides for safety and resource protection. Maintain roads to maintenance level 2. See appendix E for a definition of levels. (page 73)

Revised Forest Plan Direction

See FW direction for “Transportation System Planning: Road Maintenance” (p. 122); and “Dispersed and Developed Recreation and Wilderness: Transportation” (p. 67).

Rationale for Change(s)

Redundant with FW direction.

1986 Plan Content

2. Close, drain, and revegetate roads that are determined to be unneeded for further use. (page 74)

Revised Forest Plan Direction

FW DCs for Motorized Transportation (pages 74 and 75):

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion.

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas. (page 76)

Also see FW direction for "Transportation System Planning: Road Maintenance" (p. 122)

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Fire Management

1986 Plan Content

(page 74)

1. The management area is divided into fire suppression zones 1 and 2 based on objectives for resource protection and cost of suppression. See Section 5 for definition of zones.

2. Use prescribed fire to reduce risk and to permit lightning to more nearly play its natural role.

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Rationale for Change(s)

Redundant with FW direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

(page 74)

1. Outbreaks of insects and disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the research natural area.

2. Use prescribed fire to reduce risk and to permit lightning to more nearly play its natural role.

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

Also see "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

Rationale for Change(s)

Revised as broader direction.

Management Area 8A

Research Natural Area/ Wilderness. MA 8A follows management direction to ensure that wilderness character and uses are maintained and that nondisturbing research and education can occur on parcels determined to be suitable for either wilderness or research natural area designation. Management direction does not allow the harvest of forest products (including fuelwood) and livestock grazing in MA 8A. This management area comprises 3,805 acres (less than 1 percent of the national forest) of designated and proposed research natural areas within wilderness areas, none of which is suitable for timber production. It includes lands determined to be suitable for both wilderness and research natural area designation.

Management Emphasis and Intensity

1986 Plan Content

(page 75)

Manage for wilderness values and uses while providing opportunities for nondisruptive research and education.

Use restrictions will be imposed as necessary to kept areas in their climax state.

There will be no harvest of forest products including fuelwood.

Revised Forest Plan Direction

Management Area 8 is reclassified as **predominantly wilderness (Chiricahua, Pajarita, and Pusch Ridge); and research natural areas (Gooding and extensions, Goudy Canyon, Pole Bridge and extension, and Santa Catalina (634 acres))**. Relevant direction for these areas follows.

GDs for Designated Wilderness Areas (page 103):

- Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation.
- Restrictions on visitor freedom (such as closures, permit systems, area quotas) should only be used when less invasive measures have proven insufficient to meet management objectives.

ST for Tumacacori EMA: Within Goodding Research Natural Area and the proposed Goodding Research Natural Area Extension: Do not permit harvest of forest products, including fuelwood. (page 144)

GD for Designated Wilderness Areas: Gathering of dead and downed fuelwood should be limited to recreational campfire use. (page 105)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas (examples provided) to meet desired conditions. Further direction provided by existing law, regulation, and policy (see appendix F).

Management Area Description and Capability Area Types

1986 Plan Content

(page 75)

Includes those lands that have been determined to be suitable for both wilderness designation and designation as research natural areas (RNAs).

Includes the following areas:

Existing RNA

- Pole Bridge = 460 acres
- Santa Catalina (reduced) = 890 acres
- Goodding = 538 acres (remainder is outside Wilderness (MA8))
- Goudy Canyon = 190 (remainder is outside Wilderness (MA8))

New RNA Proposal

- Goodding Extension South = 1,470 acres
- Goodding Extension North = 47 acres
- Pole Bridge Extension = 90 acres

The Santa Catalina RNA will be reduced from 4,131 acres to 890 acres. This will give a more manageable size while maintaining viable populations of targeted species.

Pole Bridge RNA is enlarged to include a more representative example of Chiricahua pine.

The Goodding RNA is enlarged to include additional examples of Southwestern vegetative types, as well as rare and threatened or endangered species.

Capability Area Types: 6H/M, 6M, 9AH/M, and 11AR

Total acres = 3,685

Revised Forest Plan Direction

As noted above, Management Area 4 is reclassified as predominantly wilderness and research natural areas. The plan proposes extensions of certain RNAs (revised plan, table 13).

Direction related to vegetation manipulation and suitability in these areas is addressed below.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Capability area framework from the 1986 plan is not carried forward. The intent of plan decisions for enlarging RNAs was carried forward by proposing extensions.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 75)

Revised Forest Plan Direction

GD for Designated Wilderness Areas: Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation. (page 103)

GD for Vegetation in Wilderness: Vegetation treatments should only be used to restore or maintain communities to functioning systems that are sustainable and resilient under changing climate conditions and disturbance regimes. (page 105)

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

Timber harvest for ecosystem restoration is not suitable in designated wilderness areas. Timber harvest in research natural areas is suitable only if allowed in the establishment record for the area (table 14, page 167).

Rationale for Change(s)

Primary direction related to wilderness provided by existing law, regulation, and policy. Related to special management areas, the 1986 decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 75)

1. Manage the following acres at the indicated visual quality objectives:

- 3,685 acres Preservation = 100 percent

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DC for Scenic Quality in Wilderness: Wilderness areas shall be managed for a scenic integrity objective of very high, except when specified otherwise in an individual wilderness management plan. (page 105)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Wilderness Recreation

1986 Plan Content

1. Maintain trails to level 1 and level 3. See appendix E for a definition of levels. (page 76)

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DC for Recreation and Education in Wilderness: The existing recreation opportunity spectrum classification composition shall be maintained at primitive, unless specified otherwise for an individual wilderness area. (page 108)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

2. Use of motorized vehicles is prohibited except as approved for emergency or other special needs. (page 77)

Revised Forest Plan Direction

Motorized access and off-highway-vehicle-based recreation are not suitable in wilderness or research natural areas (table 14, page 167).

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Rationale for Change(s)

Primary direction for wilderness provided by existing law, regulation, and policy (see appendix F).

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689).

1986 Plan Content

(page 77)

3. Manage wilderness use at less than standard.

4. Maintain existing ROS class composition.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DC for Recreation and Education in Wilderness: The existing recreation opportunity spectrum classification composition shall be maintained at primitive, unless specified otherwise for an individual wilderness area. (page 108)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

GDs for Designated Wilderness Areas (page 103):

- Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation.
- Restrictions on visitor freedom (e.g., closures, permit systems, area quotas) should only be used when less invasive measures have proven insufficient to meet management objectives.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

(page 77)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve occupied habitat for Federally and State listed animals.

(2) Maintain or improve current populations of endangered and threatened plants.

Revised Forest Plan Direction

See FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79).

DCs for Wildlife in Wilderness (page 106):

- Wilderness contributes to preserving the natural processes and habitats that sustain native species.
- Wilderness habitats are particularly valuable to threatened and endangered species, where the factors that threaten their existence are greatly minimized.
- Native species are present and supported by properly functioning habitat conditions.

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 78)

1. Nonstructural habitat improvement projects will be based on guidelines in the Forestwide prescription. They are intended to meet the following objectives:

(1) Delist threatened and endangered species following guidelines of approved recovery plans and Memoranda of Understanding.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

1. Manage rangeland at Level A (no livestock). Management excludes livestock grazing to protect other values or eliminate conflicts with other uses. (page 78)

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

ST for Tumacacori EMA: Within Goodding Research Natural Area and the proposed Goodding Research Natural Area Extension: Do not permit livestock grazing. (page 144)

Livestock grazing is generally suitable in wilderness areas; and is suitable in research natural areas only where there are established livestock grazing allotments (table 14, page 167).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

(page 78)

1. Watershed treatment is a low priority in this Management Area. If treatment is appropriate, activities are described in appendix B.

2. Monitor these areas for watershed condition trends as relic areas.

Revised Forest Plan Direction

DC for Soil and Water in Wilderness: Natural processes dominate soil and water cycles in wilderness areas. Water quality is high. Trails and campsites do not contribute soil sediment to downstream water resources. (page 107)

Also see "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

Rationale for Change(s)

Overly prescriptive at the forest plan level. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. There will no removal of mineral materials. Mineral withdrawals will be unnecessary because the segregative effect of wilderness designation exceeds that of a withdrawal. (page 78)

Revised Forest Plan Direction

None

Rationale for Change(s)

Primary direction for wilderness provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Fire Management

1986 Plan Content

1. The management area is divided into fire suppression zones 1 and 2 based on objectives for resource protection and cost of suppression. See Section 5 for definition of zones. (page 78)

Revised Forest Plan Direction

DCs for Fire in Wilderness (page 105):

- Fire plays a natural ecological role in wilderness areas, acting as a disturbance that contributes to each area's natural character.
- Fire in wilderness areas varies in size and severity.
- Fires within an acceptable level of risk span into and across delineated wilderness boundaries.
- Fires rarely require physical human intervention, except in the wildland-urban interface.
- Wildfires do not threaten the natural characteristics of an area, nor do they threaten other resources, structures, or values at risk adjacent to wilderness areas.

GDs for Fire in Wilderness (page 105):

- Natural unplanned ignitions should be used to obtain resource benefits.
- Prescribed fire should be used to create conditions that enable naturally occurring fires to return to their historic role or to achieve wilderness area desired conditions.
- Minimum impact suppression tactics should be used in wilderness.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Rationale for Change(s)

Revised as broader direction. Primary direction provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

1. Outbreaks of insects and disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the research natural area. (page 78)

Revised Forest Plan Direction

DCs for Insects and Disease in Wilderness (page 106):

- Indigenous insects and diseases are recognized as natural disturbance mechanisms in wilderness areas.
- The scientific value of observing the role of indigenous insects and diseases as a natural dynamic in the ecosystems is exceptionally high. (page 104)

GD for Insect and Disease in Wilderness: Human controls should not be applied to insect and disease life cycles, except to protect resources on adjacent lands, to protect threatened and endangered species, or when human health and safety are a concern.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

Also see "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

Rationale for Change(s)

Revised as broader direction.

Management Area 9

Wilderness. Management Area 9 provides management direction on lands intended to preserve wilderness character concurrently with compatible livestock grazing and recreation uses. This management area comprises 397,505 acres (22 percent of the national forest) of designated and recommended wilderness areas, none of which is suitable for timber production. The management area includes all vegetation and landform types that have been determined to be suitable for wilderness area designation.

Management Emphasis and Intensity

1986 Plan Content

(page 79)

Manage for wilderness values while providing livestock grazing and providing recreation opportunities that are compatible with maintaining wilderness values and protecting resources.

Fire management emphasis will be to permit lightning-caused fires to play, as nearly as possible, their natural ecological role within wilderness.

Revised Forest Plan Direction

Management Area 9 is reclassified as predominantly:

- Wilderness (Chiricahua, Galiuro, Miller Peak, Mount Wrightston, Pajarita, Pusch Ridge, Rincon, Santa Teresa);
- Wilderness Study Area (Mount Graham); and
- Special management areas (Bighorn Sheep Management Area, proposed Cave Creek Canyon Birds of Prey and South Fork of Cave Creek Zoological-Botanical Areas, and proposed Finger Rock Canyon Research Natural Area)

Broad direction related to management emphasis for these areas follows.

GDs for Designated Wilderness Areas (page 103):

- Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation.
- Restrictions on visitor freedom (e.g., closures, permit systems, area quotas) should only be used when less invasive measures have proven insufficient to meet management objectives.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

Livestock grazing is generally suitable in wilderness areas; and is suitable in research natural areas only where there are established livestock grazing allotments (table 14, page 167).

DCs for Fire in Wilderness (page 106):

- Fire plays a natural ecological role in wilderness areas, acting as a disturbance that contributes to each area's natural character.
- Fire in wilderness areas varies in size and severity.
- Fires within an acceptable level of risk span into and across delineated wilderness boundaries.
- Fires rarely require physical human intervention, except in the wildland-urban interface.
- Wildfires do not threaten the natural characteristics of an area, nor do they threaten other resources, structures, or values at risk adjacent to wilderness areas.

GDs for Fire in Wilderness (page 106):

- Natural unplanned ignitions should be used to obtain resource benefits.
- Prescribed fire should be used to create conditions that enable naturally occurring fires to return to their historic role or to achieve wilderness area desired conditions.
- Minimum impact suppression tactics should be used in wilderness.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions. Further direction provided for individual wilderness areas (see "Plan Components for All Designated Wilderness Areas" in the revised plan). Other direction provided by existing law, regulation, and policy (see appendix F).

Management Area Description and Capability Area Types

1986 Plan Content

(page 79)

Include all vegetative and land form types that have been determined to be suitable for wilderness designation.

Includes the following areas:

Existing Wilderness

- Chiricahua (87,700 acres) = 87,150 acres (the other 550 acres are in Pole Bridge RNA)
- Pusch Ridge (56,933 acres) = 56,043 acres (the other 890 acres are in Santa Catalina RNA)
- Galiuro = 76,317 acres
- Miller Peak = 20,190 acres
- Mt. Wrightson = 25,260 acres
- Pajarita (7,420 acres) = 5,365 acres (the other 2,055 acres are in Goodding RNA)
- Rincon Mountain = 38,590 acres
- Santa Teresa = 26,780 acres

New Wilderness Proposal

- Mt. Graham (62,000 acres) = 61,180 (the other 190 acres are in Goudy RNA)

Capability Area Types: All

Total acres = 397,505

Revised Forest Plan Direction

As noted above, Management Area 4 is reclassified as predominantly wilderness and research natural areas. Management emphasis direction is provided above. The plan proposes extensions of certain RNAs (table 13, page 124).

Rationale for Change(s)

Primarily descriptive information, not a plan component. Capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 79)

Revised Forest Plan Direction

GD for Designated Wilderness Areas: Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation. (page 103)

GD for Vegetation in Wilderness: Vegetation treatments should only be used to restore or maintain communities to functioning systems that are sustainable and resilient under changing climate conditions and disturbance regimes. (page 105)

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

Timber harvest for ecosystem restoration is not suitable in designated wilderness areas. Timber harvest in research natural areas is suitable only if allowed in the establishment record for the area (table 14, page 167).

Rationale for Change(s)

Primary direction related to wilderness provided by existing law, regulation, and policy. Related to special management areas, the 1986 decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Air Resource Management

1986 Plan Content

(page 79)

1. In the original (prior to Arizona Wilderness Bill) Chiricahua and Galiaro Wilderness Area (Class 1 Areas) maintain high quality visual conditions. The form, line, texture, and color of characteristic landscapes will be clearly distinguishable when viewed as middle ground. Also, cultural resources and ecosystems will remain unmodified by air pollutants. Impacts on vegetation, animals, and water quality will be predicted using current modeling techniques.

2. Determine baseline information and the background condition of the air quality related values and specify limits of acceptable change that will affirmatively protect these values in Class 1 areas.

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning.(page 82)

DC for Scenic Quality in Wilderness: Wilderness areas shall be managed for a scenic integrity objective of very high, except when specified otherwise in an individual wilderness management plan. (page 105)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact.(page 123)

FW DC for Air: Air quality above the Coronado National Forest meets Federal and State air quality standards, including standards for visibility and health hazards from pollutants. (page 64)

DC for Chiricahua Wilderness: Air quality is consistent with the area’s class 1 Clean Air Act designation. (page 110)

DC for Galiuro Wilderness: Air quality is consistent with the area's class 1 Clean Air Act designation. (page 111)

FW Landscape Scale DC for Natural Water Sources- Water quality, stream channel stability, and aquatic habitats retain their inherent resilience to natural and other disturbances, including climate variability and change. (page 59)

Also see FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Revised as broader direction. Further direction provided for individual wilderness areas (see "Plan Components for All Designated Wilderness Areas" in the revised plan). Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Wilderness Recreation

1986 Plan Content

(page 79)

1. Maintain trails to following standards:

- 15 percent level 1
- 25 percent level 2
- 57 percent level 3
- 3 percent level 4

See appendix F for definition of levels.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DC for Recreation and Education in Wilderness: The existing recreation opportunity spectrum classification composition shall be maintained at primitive, unless specified otherwise for an individual wilderness area. (page 108)

ST for Chiricahua Wilderness: The existing recreation opportunity spectrum classification shall be maintained at primitive. (page 110)

OBJ for Miller Peak Wilderness: Restore 1 mile of user-created trails each year to a condition where it is not noticeable to visitors. (page 112)

ST for Pusch Ridge Wilderness: The existing recreation opportunity spectrum classification shall be maintained at semiprimitive nonmotorized in areas near heavily used trailheads and primitive elsewhere. (page 116)

GD for Mount Wrightson Wilderness: The existing recreation opportunity spectrum classification composition should be maintained at semiprimitive nonmotorized, or increased to primitive. (page 113)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Further direction provided for individual wilderness areas (examples provided) (see "Plan Components for All Designated Wilderness Areas" in the revised plan). Other direction provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

Note: There is no #2 standard in the plan.

Revised Forest Plan Direction

None

Rationale for Change(s)

None

1986 Plan Content

3. Use of motorized vehicles is prohibited except as approved for emergency or other special needs. (page 80)

Revised Forest Plan Direction

Motorized access and OHV-based recreation are not suitable in wilderness or research natural areas (table 14, page 167).

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions.(page 75)

Rationale for Change(s)

Primary direction for wilderness provided by existing law, regulation, and policy (see appendix F).

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689).

1986 Plan Content

(page 80)

4. Maintain existing ROS classification except recognize potential to increase primitive (P) and semi-primitive non-motorized (SPNM) opportunities by closing adjacent roads which are deemed unnecessary.

5. Manage wilderness use as follows:

Standard - 172,499 acres (generally in riparian and other concentrated use areas)

Less than standard - 225,046 acres (generally in other types and low use areas)

Revised Forest Plan Direction

See above direction regarding trail level maintenance and ROS classification in Management Area 9.

FW DCs for Motorized Transportation (page 75):

- The motorized transportation system is environmentally sustainable and meets public needs and desires under a changing climate.
- Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion.

FW MA for Motorized Transportation System: Prioritizing road decommissioning for areas that will function as high quality wildlife habitat and quiet areas (page 76)

Rationale for Change(s)

Revised as broader direction. Other direction for wilderness provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

(page 80)

6. Cooperate with Saguaro National Monument to implement as nearly identical management of the Rincon Wilderness as possible. Develop a joint operation and maintenance plan.

Revised Forest Plan Direction

MA for Rincon Mountain Wilderness: Coordinating management strategies with the Saguaro Wilderness managed by the National Park Service. (page 117)

DC for Land Ownership and Boundary Adjustments in Wilderness: Wilderness character and experiences appear seamless across agency boundaries where Coronado wilderness areas border other agency wilderness areas. (page 109)

MA for Land Ownership and Boundary Adjustments in Wilderness: Partnering with other Federal agencies to ensure management is as consistent as possible for contiguous wilderness areas. (page 109)

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

7. Permit lightning-caused fires to play, as nearly as possible, their natural ecological role within wilderness. (page 80)

Revised Forest Plan Direction

See above direction related to management emphasis in wilderness and research natural areas in Management Area 9.

Rationale for Change(s)

Redundant with other direction.

Standards and Guidelines- Trail Construction and Reconstruction

1986 Plan Content

1. Construct new trailheads as follows: (Note: These developments will be in adjacent management areas just outside the wilderness boundary.) (page 80)

Period 1

Construct trailhead parking lot and two-unit vault toilet as appropriate.

Period 2

Construct trailhead parking lot and two-unit vault toilet as appropriate.

Revised Forest Plan Direction

GD for Chiricahua (page 110), Mount Wrightson (page 113), and Pusch Ridge Wilderness Areas (page 116): Trailhead parking areas, adjacent to the wilderness area, should be designed to passively limit visitor use to levels that maintain the wilderness character.

GD for Rincon Mountain Wilderness: Trailhead parking areas should be designed to prevent motorized trespass beyond the wilderness boundary. (page 117)

Rationale for Change(s)

Revised as broader direction, with more explicit direction for individual wilderness areas. Other direction for wilderness management provided by existing law, regulation, and policy (see appendix F). Project decisions and needs will be made at the site-specific level.

1986 Plan Content

2. Construct/reconstruct trails in accordance with table 10 to aid in the distribution of wilderness users. (page 80)

Revised Forest Plan Direction

See above direction regarding trail level maintenance and ROS classification in Management Area 9.

Rationale for Change(s)

Revised as broader direction, with more explicit direction for individual wilderness areas. Other direction for wilderness management provided by existing law, regulation, and policy (see appendix F). Project decisions and needs will be made at the site-specific level.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

(page 80)

1. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for endangered and threatened plants and animals and work toward delisting.

(2) As part of livestock grazing allotment and recreation management planning, complete riparian management plans by second period.

(3) Maintain current levels of occupied habitat for:

- mule deer
- white-tailed deer
- javelina
- bighorn sheep
- pronghorn
- cottontail
- black bear
- Mt. Graham spruce squirrel
- Apache fox squirrel
- Arizona gray squirrel
- raptors
- Merriam's turkey
- Mearn's quail
- Gambel's quail
- buff-breasted flycatcher
- coppery-tailed trogon
- sulphur-bellied flycatcher
- N. tyrannulent flycatcher
- thick-billed kingbird
- Bell's vireo
- blue-throated hummingbird
- twin-spotted rattlesnake
- Arizona ridge-nosed rattlesnake
- rock rattlesnake
- Gila topminnow
- Arizona trout
- Mexican stoneroller
- Sonora chub
- Gila chub

Revised Forest Plan Direction

See FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79).

DCs for Wildlife in Wilderness (page 106):

- Wilderness contributes to preserving the natural processes and habitats that sustain native species.
- Wilderness habitats are particularly valuable to threatened and endangered species, where the factors that threaten their existence are greatly minimized.
- Native species are present and supported by properly functioning habitat conditions.

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 81)

1. Maintenance and improvement activities will be commensurate with the Wilderness Act and guidelines shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Maintain habitat for:

- mule deer
- white-tailed deer
- javelina
- pronghorn
- black bear
- Merriam's turkey
- Gould's turkey

(2) Improve habitat for:

- desert bighorn sheep
- Gila topminnow
- Sonora chub
- Arizona trout
- peregrine falcon and other species following guidelines of approved species recovery plans and memoranda of understanding.

(3) Consider and implement as appropriate, structural improvement for native and game fish habitats.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management and Improvements

1986 Plan Content

(page 81 and 82)

1. Manage suitable rangeland at levels as follows. See appendix C for definition of range management levels.

Range Management Levels

Level	Acres
A	89,900
B	242,945
C	64,700

Projected Range Condition

Range Condition	Period 1	Period 5
Satisfactory	352,790 acres	352,790 acres
Unsatisfactory	44,755 acres	44,755 acres

Management controls livestock numbers so that livestock use is within present grazing capacity. Range improvements may be constructed to protect and enhance the wilderness resources in the presence of grazing.

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

GDs for Designated Wilderness Areas: Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation. (page 103)

Livestock grazing is generally suitable in wilderness areas; and is suitable in research natural areas only where there are established livestock grazing allotments (table 14, page 167).

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

1986 Plan Content

2. Vegetative manipulation is not used for range improvement except as a result of prescribed fire. (page 82)

Revised Forest Plan Direction

GD for Designated Wilderness Areas: Wilderness character should be maintained or improved. This includes untrammeled, natural, and undeveloped qualities, as well as opportunities for solitude or primitive and unconfined recreation. (page 103)

GD for Vegetation in Wilderness: Vegetation treatments should only be used to restore or maintain communities to functioning systems that are sustainable and resilient under changing climate conditions and disturbance regimes. (page 105)

DCs for Fire in Wilderness (page 106):

- Fire plays a natural ecological role in wilderness areas, acting as a disturbance that contributes to each area's natural character.
- Fire in wilderness areas varies in size and severity.
- Fires within an acceptable level of risk span into and across delineated wilderness boundaries.
- Fires rarely require physical human intervention, except in the wildland-urban interface.
- Wildfires do not threaten the natural characteristics of an area, nor do they threaten other resources, structures, or values at risk adjacent to wilderness areas.

GDs for Fire in Wilderness (page 106):

- Natural unplanned ignitions should be used to obtain resource benefits.
- Prescribed fire should be used to create conditions that enable naturally occurring fires to return to their historic role or to achieve wilderness area desired conditions.
- Minimum impact suppression tactics should be used in wilderness.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

Rationale for Change(s)

Revised as broader direction. Other direction for wilderness management provided by existing law, regulation, and policy (see appendix F).

1986 Plan Content

3. Riparian areas will be managed to achieve and maintain satisfactory riparian conditions as described in the Forestwide prescription. This may be accomplished through the use of structural improvements, movement of livestock, of the exclusion of livestock. (page 82)

Revised Forest Plan Direction

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

FW DC for Range Management: Within riparian areas, structures used to manage livestock should be located and used in a way that does not conflict with riparian functions and processes. (page 91)

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Watershed treatment is a low priority in this Management Area. Restore damaged watersheds to satisfactory condition. Watershed restoration may consist of channel stabilization and revegetation using native or non-native species. Non-native species will be used only in emergency situations when suitable native species are not available. See appendix D for details of activities. (page 82)

Revised Forest Plan Direction

DC for Soil and Water in Wilderness: Natural processes dominate soil and water cycles in wilderness areas. Water quality is high. Trails and campsites do not contribute soil sediment to downstream water resources. (page 107)

DC for Vegetation in Wilderness: Invasive plants do not occur at levels that disrupt ecological functioning. (page 105)

GD for Vegetation in Wilderness: Vegetation treatments should only be used to restore or maintain communities to functioning systems that are sustainable and resilient under changing climate conditions and disturbance regimes. (page 105)

FW ST for Scenery: Only native or nonpersistent seed and plant materials will be used when revegetating disturbed sites. (page 82)

Also see “Standards and Guidelines- Watershed and Soil Maintenance and Improvement” under Management Area 1 (p. 143).

Rationale for Change(s)

Revised as broader direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Lands Administration

1986 Plan Content

1. Act on all land exchange offers involving acquisition of private land. (page 82)

Revised Forest Plan Direction

See FW direction for “Land Classification: Ownership Adjustment” (p. 105).

Rationale for Change(s)

Redundant with FW direction.

Standards and Guidelines- Rights-of-way Acquisition

1986 Plan Content

1. Attempt to acquire needed rights-of-way to provide public access to the wilderness areas. Coordinate with other agencies to acquire public access and develop public parking for trails. (page 82)

Revised Forest Plan Direction

FW MA for Land Ownership Adjustments and Boundary Management (Rights-of-way): Ensuring administrative and public access to National Forest System lands by acquiring road and trail rights-of-way needed to meet public access objectives using various acquisition methods. Priority for road and trail rights-of-way acquisitions should be as follows: 1) Public access to National Forest System lands; 2) Administrative access to National Forest System lands. (page 95)

DC for Land Ownership and Boundary Adjustments in Wilderness: Wilderness character and experiences appear seamless across agency boundaries where Coronado wilderness areas border other agency wilderness areas. (page 95)

MA for Land Ownership and Boundary Adjustments in Wilderness: Partnering with other Federal agencies to ensure management is as consistent as possible for contiguous wilderness areas. (page 109)

Rationale for Change(s)

Revised as broader direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

(page 82)

1. Utilize prescribed fire to reduce to an acceptable level, the risks and consequences of wildfire within the wilderness or escaping from wilderness.

2. Due to external constraints, fire management options to have lightning fires play a natural role in wilderness resource management may be accomplished by both natural and management ignitions.

3. The Management Area is divided into fire suppression zones 1 and 2 based on objectives for resource protection and cost of suppression. See Section 5 for definitions of zones.

4. Conduct suppression in a manner compatible with overall wilderness management objectives. Preference will be given to the method that will cause the least:

(a) Alteration of wilderness landscape.

(b) Disturbance of the land surface.

(c) Disturbance to visitor solitude.

(d) Reduction of visibility during periods of visitor use.

(e) Adverse effect on other air quality related values;

Revised Forest Plan Direction

GDs for Fire in Wilderness (page 106):

- Natural unplanned ignitions should be used to obtain resource benefits.
- Prescribed fire should be used to create conditions that enable naturally occurring fires to return to their historic role or to achieve wilderness area desired conditions.
- Minimum impact suppression tactics should be used in wilderness.

Also see above direction related to management emphasis in wilderness and research natural areas; and air resource management in Management Area 9.

Rationale for Change(s)

Redundant with other direction. Primary direction provided by existing law, regulation, policy, and guidance (see appendix F).

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

1. Outbreaks of insects and disease will not be controlled, except where there is a clear and imminent danger to timber or other values outside the wilderness, and then only by approval of the Regional Forester. (page 82)

Revised Forest Plan Direction

DCs for Insects and Disease in Wilderness (page 106):

- Indigenous insects and diseases are recognized as natural disturbance mechanisms in wilderness areas.
- The scientific value of observing the role of indigenous insects and diseases as a natural dynamic in the ecosystems is exceptionally high.

GD for Insect and Disease in Wilderness: Human controls should not be applied to insect and disease life cycles, except to protect resources on adjacent lands, to protect threatened and endangered species, or when human health and safety are a concern. (page 106)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

Also see "Standards and Guidelines- Insect and Disease Management" for Management Area 1 (p. 147).

Rationale for Change(s)

Revised as broader direction.

Management Area 14

Zoological-Botanical Area. Management Area 14 provides management direction intended to ensure the sustainability of unique plant and animal species and habitat, including riparian areas, in and along the South Fork of Cave Creek (Chiricahua Mountains) and Guadalupe Canyon (Peloncillo Mountains). Special conservation practices, such as formal designation as a zoological or botanical area, are an option in this management area. Management direction allows recreation activities and other specific uses, including facilities that protect and conserve each parcel's unique resources. This management area comprises 4,240 acres (less than 1 percent of the national forest), none of which are suitable for timber production.

Management Emphasis and Intensity

1986 Plan Content

(page 83)

Manage to perpetuate the unique wildlife or vegetative species.

Improve and manage riparian areas (as defined by FSM 2526 – Riparian Watershed Management) to benefit riparian dependent resources.

Recreation activities and other uses may occur to the extent that they do not degrade the unique values.

Facilities may be allowed and maintained for the purpose of protecting these resources.

Visual quality objectives will be met or exceeded.

Revised Forest Plan Direction

Management is reclassified as predominantly special management areas (Guadalupe Canyon, South Fork of Cave Creek, and proposed Cave Creek Canyon Birds of Prey Zoological-Botanical Areas); and the Bunk Robinson Wilderness Study Area (which encompasses most of Guadalupe Canyon). Broad direction related to management emphasis in these areas follows.

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.
- These areas contain unique or significant animals, animal groups, or animal communities, habitat, location, life history, ecology, environment, rarity, or other features.

FW DCs for Riparian Areas (page 52):

- The ecological condition of riparian areas is resilient to animal and human use.
- Habitat and ecological conditions are capable of providing self-sustaining populations of native, riparian-dependent plant and animal species.

FW GD for Riparian Areas: Management activities should only be allowed in riparian areas if soil function and structure, hydrologic function and native riparian plant assemblages are sustained. (page 53)

Related to recreation management, see FW direction for dispersed and developed recreation (p. 60).

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.
- New recreation facilities other than trails should not be constructed.

Also see FW direction for facilities management (p. 126).

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact. (page 123)

Rationale for Change(s)

Revised the management area framework based on administrative and user needs and comments received during the planning process. Management areas occur within designated ecosystem management areas (EMA) that represent the 12 mountain ranges on the Coronado National Forest. Plan components are prescribed forestwide and in management areas to meet desired conditions.

Management Area Description and Capability Area Types

1986 Plan Content

(page 83)

Lands within the South Fork of Cave Creek (Chiricahua Mountains) and Guadalupe Canyon (Peloncillo Mountains) that have been identified as supporting flora and fauna associations unique enough to require special management practices, including formal designation as a zoological or botanical area. Includes known essential habitat for threatened and endangered plants and animals.

Capability Area Types: 2P, 2PH, 6P, 6PH, 6HM, 6M, 7P, and 11AR

Total acres = 4,240 (South Fork = 762 acres; Guadalupe Canyon = 3,478 acres)

Revised Forest Plan Direction

As noted above, Management Area 4 is reclassified as predominantly research zoological-botanical areas and wilderness study areas. Management emphasis direction is provided above.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 83)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

GDs for Recommended Wilderness Areas and Wilderness Study Areas: (page 120)

- Timber harvest should not be permitted.
- Gathering of forest products for sale should not be permitted.

Timber harvest for ecosystem restoration is generally a suitable activity in zoological-botanical areas, but not suitable in wilderness areas (table 14, page 167).

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

(page 83)

1. Maintain trails to level 3.

See appendix E for definition of levels.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness areas should be managed to maintain their wilderness character.
- Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources.

Rationale for Change(s)

Overly prescriptive at the forest plan level. Broader direction provided by FW and management area decisions.

1986 Plan Content

(page 83)

2. Leave road into South Fork open for access to recreation residences and to existing trail and day-use picnic area.

3. Use of motorized vehicles is permitted only on designated roads.

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions. (page 75)

Off-highway-vehicle based recreation is generally not a suitable use in special management areas. Motorized access and OHV recreation are generally not suitable in wilderness study areas (see revised plan, chapter 5).

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

(page 83)

4. Emphasize semi-primitive nonmotorized recreation opportunities above South Fork Picnic Area and roaded natural opportunities below.

5. Manage dispersed use at a level of 50 percent less than standard and 50 percent standard.

Revised Forest Plan Direction

FW GD for Recreation: The recreation opportunity spectrum framework for guiding recreation planning and management and the Coronado National Forest recreation opportunity spectrum maps should be incorporated into project designs as they are planned and implemented. (page 79)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

GDs for Recommended Wilderness Areas and Wilderness Study Areas (page 120):

- Wilderness study areas and recommended wilderness should be managed for primitive recreation settings.
- New recreation facilities other than trails should not be constructed.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

1986 Plan Content

6. Recommend the designation of the South Fork of Cave Creek (outside the wilderness area) as a zoological-botanical area and portions of Guadalupe Canyon as a zoological area. A ten-foot wide strip along each side of the South Fork Road, around South Fork Picnic Area, and around the existing recreation residences will be excluded from this designation. They will be part of Management Area 3A. (page 83)

Revised Forest Plan Direction

The South Fork of Cave Creek and Guadalupe Canyon are currently designated zoological-botanical areas. Other areas have been proposed for designation as well. See direction above related to management emphasis in Management Area 14.

Rationale for Change(s)

Decisions carried forward with new proposals for zoological-botanical areas.

1986 Plan Content

(page 83)

7. Develop an environmental education program in South Fork by considering the following techniques:

(a) Employing interpreters and educators (volunteers or paid).

(b) Publishing plant and animal guides and visitors etiquette brochures.

(c) Building environmental displays.

(d) Conducting visitor programs.

Revised Forest Plan Direction

FW DC for Recreation: Interpretation and visitor education programs help visitors understand how to reduce their impacts on ecosystems, and visitors actively help support the Coronado National Forest's efforts to protect natural resources and wilderness values. (page 77)

FW MA for Recreation: Developing interpretive facilities and conservation education programs to provide opportunities for visitors and the increasingly urban population in southeastern Arizona to learn about and appreciate nature and wild places. (page 80)

Also see "Human Resource Programs: Volunteers" (p. 104), related to forestwide goals and desired conditions for volunteerism.

Rationale for Change(s)

Revised as broader direction.

1986 Plan Content

8. Monitor effects of hunting and trapping on wildlife and safety of people. This includes the use of firearms and air guns. Consider prohibiting these activities if necessary through a Forest Supervisor's closure. (page 83)

Revised Forest Plan Direction

FW DC for Animals and Rare Plants: Hunting, fishing, and other wildlife-based recreation activities are encouraged where wildlife populations are flourishing. (page 67)

FW DC for Recreation: Dispersed recreation activities on the Coronado National Forest include hiking, viewing natural features and wildlife, relaxing, driving for pleasure, nature study, picnicking, camping, off-highway vehicle riding, fishing, and hunting, among others. (page 78)

Motorized outfitting and guiding activities including hunting are generally not suitable uses in special management areas (table 14, apge 167).

Rationale for Change(s)

Decision not carried forward. Project decisions and needs will be made at the site-specific level.

1986 Plan Content

9. A Forest Service permit will be required for plant collection and for research activities that involve placing anything on the National Forest. Collection permits will be locally available in the Cave Creek area within availability of personnel and volunteers to issue them. Permits will be used as a tool to monitor resource use and potential impacts. (page 83)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Special use permits within these areas are inappropriate unless they are related to research for which the area is designated. (page 123)

ST for Peloncillo (page 136) and Chiricahua (page 131) EMAs: Within Guadalupe Canyon and South Fork of Cave Creek Zoological-Botanical Areas:

a. A special use permit is required for any plant or animal collection.

b. A special use permit should be issued for scientific research that would involve placing anything on National Forest System lands within the proposed zoological area.

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

Forest product use is generally not suitable in special management areas or wilderness (table 14, page 167).

Rationale for Change(s)

Addressed as broader direction with specific decisions for special management areas by EMA.

Standards and Guidelines- Visual Resource Management

1986 Plan Content

(page 83)

1. Manage the following acres at the indicated Visual Quality Objectives:

    4,240 acres Retention (100 percent)

Revised Forest Plan Direction

FW GD for Scenery: Projects should use the Coronado National Forest Scenery Management System maps (including scenic integrity, scenic class, and concern levels) and meet scenic integrity objectives. Additionally, projects should use the scenery management system implementation guide during project design and planning. (page 82)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Scenic conditions are natural, unaltered, and wholly intact. (page 123)

GD for Recommended Wilderness Areas and Wilderness Study Areas: Wilderness study areas and recommended wilderness should be managed to preserve or enhance scenic resources. (page 120)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

Standards and Guidelines- Developed Recreation Management

1986 Plan Content

1. Complete site plan for South Fork Picnic Area. (page 84)

Revised Forest Plan Direction

FW MAs for Recreation (page 79):

- Using recommendations from various recreation plans (such as concept plans, corridor management plans, and interpretive plans).
- Completing recreation management plans as needed. This includes concept plans, corridor management plans, interpretive plans, wilderness plans, and others.

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction.

1986 Plan Content

2. No new recreational developments except as needed to rehabilitate existing developed sites. (page 84)

Revised Forest Plan Direction

GDs for Developed Recreation LUZ (page 101):

- Recreation opportunity spectrum classes in this land use zone should be roaded natural, roaded modified, rural, and urban unless conflicting with wilderness management or needed to support the larger forest setting.
- Scenic resources should be managed so that human activities are visually subordinate and blend into the landscape as much as possible, as per the Coronado National Forest scenic integrity objective map and recreation opportunity spectrum classes. Utilitarian facilities that would not meet this guideline because of their functional requirements should be mitigated to minimize their contrast with line, form, color, texture, and scale of the surrounding landscape and built environment.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

GDs for Recommended Wilderness Areas and Wilderness Study Areas: New recreation facilities other than trails should not be constructed. (page 120)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Project decisions and needs will be made at the site-specific level.

1986 Plan Content

3. Existing recreation residences may remain in place subject to terms of permit renewal and review procedures. (page 84)

Revised Forest Plan Direction

OBJ for Special Uses: Phase out permits for isolated cabins and privately owned residences that are not part of the recreation residence program by 2028. (page 84)

MA for Special Uses: Using the policy for management of recreational residences as outlined in the "Architectural Guidelines for Recreation Residences on the Coronado National Forest" (USDA FS 2015a) (the guidelines). Managing items not covered in the guidelines with input from a committee consisting of the district rangers of Douglas, Safford, and Santa Catalina Ranger Districts and the forest supervisor or deputy forest supervisor. (page 86)

GD for Land Ownership Adjustments and Boundary Management: Federal lands offered by the United States in a proposed land exchange should meet one or more of the following criteria: lands with long-term land occupancy commitments, high management and operating costs, do not contribute significantly to achieving management objectives, have minimal benefit to the public, and would not create an isolated non-Federal parcel surrounded by National Forest System lands such as, but not limited to, recreation residence areas and administrative sites. (page 93)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Project decisions and needs will be made at the site-specific level.

1986 Plan Content

4. Maintain the road in South Fork to level 4. Maintain at times which will not disturb nesting birds. See appendix E for a definition of levels. Install signing or speed bumps (topics) as necessary to encourage safe traffic speeds. (page 84)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

Overly prescriptive at the forest plan level, revised as broader direction. Project decisions and needs will be made at the site-specific level.

Standards and Guidelines- Wildlife and Fish

1986 Plan Content

(page 84)

1. Under this prescription, the general objective is to emphasize non-consumptive wildlife recreation activity. Management plans for designated national zoological areas will be completed in cooperation with State and Federal wildlife agencies and other wildlife and plant oriented groups and agencies. Specific standards and guidelines for management of wildlife are shown in the Forestwide prescription for activities appropriate to this Management Area. They are intended to meet the following objectives:

(1) Maintain and improve current habitat for Federally listed plant and animal species and work toward delisting.

(2) Maintain or improve current levels of occupied habitat for:

- Apache fox squirrel
- white-tailed deer
- mule deer
- javelina
- pronghorn
- cottontail
- raptors
- Mearn's quail
- Gould's turkey
- Merriam's turkey
- coppery-tailed trogon
- sulphur-bellied flycatcher
- beardless flycatcher
- thick-billed kingbird
- Bell's vireo
- blue-throated hummingbird
- Arizona ridge-nosed rattlesnake
- Arizona trout

(3) Allow nongame recreation use demand to occur while maintaining occupied habitat for species listed above. Future limits on nongame use may be avoided by implementation of an effective environmental education program (See Dispersed Recreation Management guidelines.)

Revised Forest Plan Direction

See above direction regarding management area emphasis. See FW direction for “Wildlife and Fish: Habitat Requirements and Agency Cooperation” (p. 79).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Threatened and Endangered, Fish, Game, and Nongame Habitat Improvement

1986 Plan Content

(page 85)

1. Maintenance of existing structures and development of new structural and nonstructural improvements will be based on guidelines shown in the Forestwide prescription. They are intended to meet the following objectives:

(1) Maintain quality of forage for:

- white-tailed deer
- mule deer
- Merriam's turkey
- Gould's turkey

(2) Delist threatened and endangered species and reoccupy historical habitat with other identified species following approved species recovery plans and Memoranda of Understanding. Also improve habitat for Federally listed plants and animals following these same guidelines.

Revised Forest Plan Direction

See FW direction for "Wildlife Habitat Maintenance…" (p. 91). Also see FW direction for "Wildlife and Fish: Habitat Requirements and Agency Cooperation" (p. 79); and FW direction for "Wildlife and Fish: Threatened and Endangered Species Management Plans" (p. 83).

Rationale for Change(s)

Redundant direction. Direction provided by broader decisions related to wildlife and rare plant populations, vegetation communities, and various land management activities. Further direction for wildlife and plant species management and protection is provided by existing law (ESA), regulation, and policy (see appendix F), and recovery plans and conservation agreements. Project-level decisions and needs will be determined on a site-specific basis.

Standards and Guidelines- Range Management

1986 Plan Content

(page 85)

1. In the South Fork area, manage suitable rangeland at Level C with the utilization level established at 30 percent use by weight of key species in key areas.

In the Guadalupe Canyon area, manage suitable rangeland at levels A or D. See appendix C for definition of management levels.

Projected Range Condition

Range Condition	Period 1	Period 5
Satisfactory	3,604 acres	3,816 acres
Unsatisfactory	636 acres	424 acres

Revised Forest Plan Direction

FW DC for Range Management: Domestic livestock grazing does not move the landscape away from the desired composition and structure of plant communities. Rangeland ecosystems are diverse, resilient, and functioning within a healthy, sustainable landscape in the face of a changing climate. Areas that are grazed have stable soils, functional hydrology, and biotic integrity, while supporting healthy, diverse populations of native wildlife. (page 90)

FW GD for Range Management: Grazing management practices should be designed to maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological zone. Additionally, grazing management should retain ground cover sufficient for the forage and cover needs of native wildlife species. (page 91)

Livestock grazing is a suitable use in the Appleton-Whittell Research Ranch; and is suitable in research natural areas only where there are established livestock grazing allotments (table 14, page 167)

Rationale for Change(s)

The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

1. Removal of vegetation is limited to research and educational activities under permit, salvage operations, invading species, and maintenance and improvement of wildlife habitat and visual quality. (page 85)

Revised Forest Plan Direction

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.

Forest product use is generally not suitable in research natural areas or wilderness areas (table 14. Page 167).

Rationale for Change(s)

Revised as broader direction. Other direction provided for invasive species, wildlife habitat, and visual quality (see above and forestwide direction).

Standards and Guidelines- Watershed and Soil Maintenance and Improvement

1986 Plan Content

1. Watershed treatment is a high priority in this Management Area. Watershed maintenance and improvement may consist of channel stabilization and revegetation using native species. See appendix D for details and activities. (page 85)

Revised Forest Plan Direction

Same as "Standards and Guidelines- Watershed and Soil Maintenance and Improvement" under Management Area 1 (p. 143).

FW ST for Scenery: Only native or nonpersistent seed and plant materials will be used when revegetating disturbed sites. (page 72)

Rationale for Change(s)

Redundant direction, and overly prescriptive at the forest plan level. Addressed by FW direction for watershed and soil management, with more explicit direction by resource (natural water sources, constructed waters, range management, etc.). Project-level decisions and needs will be determined on a site-specific basis.

1986 Plan Content

2. Manage all programs to eliminate or minimize onsite and downstream water pollution. (page 85)

Revised Forest Plan Direction

See FW direction for "Watershed and Soil Maintenance: Project BMPs" (p. 98).

Rationale for Change(s)

Redundant with FW direction for watershed management and protection. Primary direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Minerals Management

1986 Plan Content

(page 85)

1. Recommend withdrawals from mineral entry to protect essential habitats for threatened and endangered species and recreational opportunities and facilities investments.

2. There will be no removal of mineral materials.

3. Recommend no surface occupancy for leasable minerals.

Revised Forest Plan Direction

MA for Land Ownership Adjustments and Boundary Management (Locatable Mineral Withdrawals): Requesting new withdrawals and the extension or continuation of a needed existing withdrawal when necessary to: Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values. (page 95)

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

ST for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Salable minerals extraction will not be allowed. (page 123)

ST for Recommended Wilderness Areas and Wilderness Study Areas: Salable minerals extraction will not be allowed. (page 119)

Energy development is generally not a suitable use in special management areas or wilderness areas (table 14, page 167).

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

(page 85)

1. The South Fork area is within fire suppression zone 1 and the Guadalupe Canyon Area is within fire suppression zone 2. See section 5 for definition of zones.

2. Use prescribed fire to maintain or improve the unique vegetation or wildlife species.

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

DC for Riparian: Fire rarely burns through this vegetation type, and fire in the surrounding watershed periodically provides slight increases in sediment and water that cause minimal channel modification. (page 52)

Rationale for Change(s)

Overly prescriptive at the forest plan level. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

1986 Plan Content

(page 86)

3. Fuel treatment may consist of chipping, broadcast burning, piling and burning, lopping and scattering, or fuelwood gathering.

4. All projects that include prescribed burning will include specific burning prescriptions that will insure the fire can be controlled within established boundaries and that the burning meets the desired resource objectives.

Revised Forest Plan Direction

See FW direction for “Timber Management: Fuelwood and Other Products” (p. 95).

Rationale for Change(s)

Redundant with FW direction. More explicit direction provided for specific vegetation communities and habitats to protect or retain certain components (e.g., snags).

1986 Plan Content

5. Prescribed fire will be used to reduce fuel hazard and enhance wildlife habitat. (page 86)

Revised Forest Plan Direction

See direction above regarding prescribed fire in these areas.

Rationale for Change(s)

Redundant with other direction.

1986 Plan Content

(page 86)

6. Within foreground distance zones of sensitivity level 1 and 2 (trails, roads, use areas, and water bodies), require 100 percent treatment of all activity slash.

7. Burn debris piles in locations and at times that will minimize scorching of adjacent trees and shrubs.

Revised Forest Plan Direction

FW DC for Scenery: Management activities such as vegetation treatments and prescribed fire appear as part of the natural landscape over time and management created debris, such as slash along concern level 1 and 2 travelways, are located and arranged to minimize their visual disturbance in the immediate foreground (up to 300 feet, unless visibility modeling shows that it is less). (page 81)

FW GD for Scenery: Effects from prescribed fire should be considered during project planning and implementation. Blackened and scorched vegetation may be visible in project areas in the short term following treatments, but scenic integrity objectives should be met in the long term, though blackened trunks may remain visible. (page 83)

Rationale for Change(s)

Revised as broader direction. Project decisions and design criteria will be made at the site-specific level.

Standards and Guidelines- Insect and Disease Management

1986 Plan Content

8. Outbreaks of insects and disease will be controlled if there is a significant danger to the recreation uses or the unique vegetation or wildlife species, of if poses a threat to other uses outside the zoological area. (page 86)

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: All special areas are characterized by generally unmodified environments in which unique natural features are preserved. (page 123)

Also see “Standards and Guidelines- Insect and Disease Management” for Management Area 1 (p. 147).

Rationale for Change(s)

Revised as broader direction.

Management Area 15

Wild Chile Botanical Area. Management Area 15 is designated as the Wild Chile Botanical Area. Direction in the plan for this management area is intended to protect and conserve wild relatives of the economically important chile (i.e., chiltepin, *Capsicum annuum* var. *glabriusculum*). This management area comprises 2,836 acres (less than 1 percent of the national forest) of lands within the Rock Corral Canyon subwatershed that have unique vegetation and wildlife requiring special management practices. Vegetation consists of 2,344 acres of oak woodland, 421 acres of desert grassland, and 71 acres of deciduous riparian habitat. Slopes are less than 15 percent on 74 acres; from 15 to 40 percent on 814 acres; and greater than 40 percent on 1,948 acres. The Wild Chile Botanical Area has about 3.5 miles of unpaved roads. About 1,125 acres of the management area is suitable for livestock grazing, and none is suitable for timber production.

Management Emphasis and Intensity

1986 Plan Content

(page 86-1)

This area is an administrative designation that provides for additional notoriety, protection, and research on wild relatives of economically important crops, in particular wild chile (*Capsicum annuum* var. *aviculare*). General forest management will continue under the multiple-use sustained-yield principles that guided this area previous to the Management Area 15 delineation.

Revised Forest Plan Direction

The Wild Chile area occurs in the Tumacacori EMA. Key direction for these areas is provided below.

Rationale for Change(s)

Primarily descriptive information, not a plan component. Capability area framework from the 1986 plan is not carried forward.

Management Area Description and Capability Area Types

1986 Plan Content

(page 86-1)

Lands within the Rock Corral Canyon sub-watershed located on the Nogales Ranger District that have been identified as supporting flora that are unique enough to require special management practices including formal designation as a botanical area.

The vegetation consists of 2,344 acres of oak woodland, 421 acres of desert grassland, and 71 acres of deciduous riparian habitat.

Slopes are less than 15 percent on 74 acres,15 to 40 percent on 814 acres, and greater than 40 percent on 1,948 acres.

The Botanical Area contains about 3½ miles of unimproved roads (Level 2).

The management area contains no suitable timberland and 888 acres of suitable livestock grazing land.

All land located within this management area is National Forest System land.

The new management areas was carved out of existing Management Areas 1, 4, and 7)

Capability Area Types: (See Management Areas 1,4, and 7 for this information)

Total acres = 2,836

Revised Forest Plan Direction

The 2,836-acre Wild Chile Botanical Area was designated in 1999. (page 141)

Rationale for Change(s)

Proposed designation implemented in 1999. Capability area framework from the 1986 plan is not carried forward.

Specific Management Prescription

1986 Plan Content

Timber Suitability: All acres unsuitable. (page 86-1)

Revised Forest Plan Direction

The Coronado National Forest has zero acres of land suitable for timber production (page 170).

However, timber harvest for ecosystem restoration is generally suitable in this area (table 14, page 167).

Rationale for Change(s)

Decision carried forward, based on an updated timber suitability analysis (appendix C).

Standards and Guidelines- Dispersed Recreation

1986 Plan Content

1. Use of motorized vehicles is permitted only on designated roads. (page 86-1)

Revised Forest Plan Direction

FW ST for Motorized Transportation System: Motor vehicle use is allowed on the designated system of roads and motorized trails shown on the motor vehicle use map that is available at each ranger district office. Motor vehicle use is prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions.(page 75)

Off-highway-vehicle based recreation is generally not a suitable use in special management areas (table 14, page 167).

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Nonmotorized recreation is allowed on a limited basis on designated trails to protect soil conditions and hydrologic flow. New trails are discouraged. (page 123)

Rationale for Change(s)

As described in the revised forest plan, motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval. Motor vehicle use maps are reviewed and updated as needed on an annual basis, consistent with the Travel Management Rule (73 FR 74689). The Coronado National Forest motorized transportation system also includes National Forest System roads that are only available for administrative and permitted use. This system of roads is not displayed on the motor vehicle use map.

1986 Plan Content

(page 86-1)

2. A Forest Service permit will be required for plant collection and for research activities that involve placing anything on the National Forest. Collection permits can be issued to Native Seeds/Search for up to 10 years to include:

(1) continued plant monitoring,

(2) limited removal of plant parts,

(3) establishment of small enclosures,

(4) mist-netting, small animal trapping, and/or invertebrate collections consistent with State game department requirements.

Additionally, the permit could be issued to authorize Native Seed/Search organization the responsibility of conduct and management of research and other tours of the Chile Botanical Area in the interest of scientific investigation.

Revised Forest Plan Direction

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Special use permits within these areas are inappropriate unless they are related to research for which the area is designated. (page 123)

ST for Peloncillo (page 136) and Chiricahua (page 131) EMAs: Within Guadalupe Canyon and South Fork of Cave Creek Zoological-Botanical Areas:

a. A special use permit is required for any plant or animal collection.

b. A special use permit should be issued for scientific research that would involve placing anything on National Forest System lands within the proposed area.

FW ST for Special Uses: A special use permit is required for collection of plants or animals for commercial purposes. (page 85)

Except for traditional uses, forest product use is generally not suitable in special management areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Range Management

1986 Plan Content

1. Maintain existing grazing at the current management intensity and operation. Keep non-use season consistent with Chile plant protection during its growth period (approximately August to November). (page 86-1)

Revised Forest Plan Direction

GD for Tumacacori EMA: Within the Wild Chile Botanical Area: Livestock grazing should be deferred during the growing season of wild chiles, approximately August to November. (page 144)

Livestock grazing is generally suitable in special management areas where there are established livestock grazing allotments (table 14, page 167).

Rationale for Change(s)

Decision partially carried forward. The revised forest plan makes suitability determinations for livestock grazing based on desired conditions, objectives, standards and guidelines for the various management areas described in this plan. Livestock grazing permits and decisions will be made at the project-level subject to NEPA and other laws, regulation, and policy.

Standards and Guidelines- Timber Sale Preparation and Administration

1986 Plan Content

1. Removal of vegetation is limited to research and educational activities under permit. (page 86-1)

Revised Forest Plan Direction

DC for Tumacacori EMA: Plants that are traditionally important to the O'odham people (including acorn bearing oaks, agaves, banana yucca, beargrass, walnuts, mulberry, chiltepines, and sayas) are available for sustainable traditional and cultural uses. (page 143)

GD for Tumacacori EMA: Management activities involving ground disturbance and/or vegetation management should incorporate site-specific design features to benefit habitat for, or mitigate impacts to, rare or unique vertebrate, invertebrate and plant populations. (page 144)

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Visitor access and use occurs at environmentally acceptable levels to maintain the research values of the research natural area.
- Special use permits within these areas are inappropriate unless they are related to research for which the area is designated.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.

Except for traditional uses, forest product use is generally not suitable in special management areas (table 14, page 167).

Rationale for Change(s)

Revised as broader direction.

Standards and Guidelines- Minerals Management

1986 Plan Content

1. Recommend no surface occupancy for leasable minerals. (page 86-1)

Revised Forest Plan Direction

DCs for Research Natural Areas, Botanical, Zoological, and Other Special Areas (page 123):

- All special areas are characterized by generally unmodified environments in which unique natural features are preserved.
- Zoological areas protect the unique wildlife and associated habitat for which they are designated.

Energy development is generally not a suitable use in special management areas or wilderness areas (table 14, page 167).

Rationale for Change(s)

Revised as FW direction. Other direction provided by existing law, regulation, and policy (see appendix F).

Standards and Guidelines- Fire and Fuels Management

1986 Plan Content

1. The Rock Corral Watershed is in fire suppression zone 2. Fire suppression should be conducted in such a fashion to protect and promote botanical values. Prescribed fire may be used prior to chile flowering and fruiting. (page 86-1)

Revised Forest Plan Direction

GD for Tumacacori EMA: Within the Wild Chile Botanical Area (page 144):

- Planned and unplanned ignitions should be used seasonally prior to wild chile flowering and fruiting.
- Wild chile plants should be protected when high-severity fire threatens the population.

DC for Research Natural Areas, Botanical, Zoological, and Other Special Areas: Fire management mimics natural fire processes and is compatible with ongoing research. (page 123)

DC for Riparian: Fire rarely burns through this vegetation type, and fire in the surrounding watershed periodically provides slight increases in sediment and water that cause minimal channel modification. (page 52)

Rationale for Change(s)

Decision and intent carried forward, supported by broader direction. Primary direction for fire management provided by existing law, regulation, policy, and guidance (see appendix F).

References

United States Department of the Interior, Fish and Wildlife Service (USFWS). 1993. Mount Graham Red Squirrel *Tamiasciurus hudsonicus grahamensis* Recovery Plan. Unpublished report. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. On file at: Coronado National Forest Supervisor's Office, Tucson, AZ. 179 pp

Appendix I – Comment Letters Received from Federal and State Agencies, Local Governments and Native American Tribes

Letters from Agencies, Governments, and Tribes

The following letters were received from Federal and State agencies, local governments and Native American tribes. Many of the letters received were scanned images, which makes them inaccessible to users of assistive reading devices. Therefore, to accommodate all readers, we have reproduced the primary text of each letter here, omitting logos and stylized letterheads. Letters are arranged in alphabetical order. Copies of the original letters are available for viewing from the project record.

Arizona Game and Fish Department

The State of Arizona
Game and Fish Department
5000 W. Carefree Highway
Phoenix, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

March 3, 2014

Jim Upchurch
Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Dear Jim:

The Arizona Game and Fish Department (Department) has reviewed the Draft Forest Land and Resource Management Plan (LRMP) and Environmental Impact Statement (EIS) and provides comments in two attached tables, one for the LRMP, and one for the EIS.

The Department appreciates the opportunity to comment on the draft LRMP and EIS and provides as thorough review as possible given overlapping Forest review priorities for this LRMP and the Rosemont Mine EIS. In general, the documents are well written and provide the reader with a clear understanding of the future of activities on the Forest. I did want to point out though that the Department would have appreciated the opportunity for greater involvement in the development and review of the LRMP, including participation on Interdisciplinary Teams and being afforded Cooperating Agency status as provided for in our Master Memorandum of Understanding (MOU) with the Forest Service. Further, the quality of the documents would have been improved with enhanced involvement from Department staff. The Department recommends facilitating better collaboration and removal of unnecessary obstacles such as prohibiting the Department from preliminary review of the plan outside of the confines of your offices. Federal laws including NEPA, Fish and Wildlife Coordination Act, Federal Advisory Committee Act, and our MOU clearly direct better Forest Planning coordination with the Department which has statutory authority and subject matter expertise. The Department's collaborative involvement and review provides the public and the Forest with a more comprehensive, defensible, and accurate analysis of impacts to natural resources including state trust resources.

I also wanted to raise an issue of concern with the overlapping nature but separate release of LRMP and Travel Management Plan (TMP) planning. This incongruous approach makes it very difficult for the Department and stakeholders to accomplish a proper review of both documents. In the attached comments table for the LRMP, the Department identifies a number of places where the LRMP appears to be inconsistent with the travel management planning as understood from our involvement with that process. However, without the TMP it is impossible to fully analyze effects. For example, the small, imprecise maps showing Ecosystem Management Areas in the LRMP do not afford the amount of detail needed to understand where land use zones and proposed Wilderness may contradict or preclude TMP decisions. Even within the LRMP there are statements that, on one hand, imply that the TMP makes implementation level decisions on road designations and motorized travel prohibitions but, on the other hand put forth standards which

seem to make those decisions prior to TMP availability. The Department strongly recommends the Forest TMP be included in the LRMP process for better consistency and public review.

The Department has multiple concerns with Wilderness, Recommended Wilderness, and Wild and Scenic designations where the Department's ability to effectively manage wildlife resources may be negatively and unnecessarily impacted. Further, access in southeastern Arizona is a serious concern to the Department and our stakeholders and additional restrictions to vehicular access is not warranted at this time. Also, any language regarding Forest Service permitting for the collection of animals must be clarified throughout the document to accurately reflect the Arizona Game and Fish Department authority regarding take of state trust species.

The Department provides the following issues of general concern:

- Locatable Mineral Withdrawals have been all but eliminated from further use by the Forest. The Department believes this is a short-sighted approach and eliminates an important management tool in protecting sensitive wildlife resources.
- Inconsistencies exist within the plan and between the EIS and LRMP which must be reconciled in the final documents. Both documents need to be reviewed for consistency of terminology and definitions (See specific comments attached). For example, a number of rare or endangered species are characterized as common in the LRMP. Also, the definition of Wild Backcountry in the EIS appears to be from a previous draft while the LRMP has been modified to be consistent with the Department's recommendations.
- The Department is concerned that the Forest has no guideline protecting or maintaining authorized routes connecting to existing roads on State Trust Land. This may lead to public access issues, and the Department offers to assist in obtaining legal access across State Land.
- The Forest should amend the plan and DEIS to allow motor vehicle use off the designated travel system limited to single trip use to retrieve legally taken big game species where such use does not negatively impact soils or vegetation.
- One of the key issues discussed at our recent Coordination Meeting was the need for consistency between forests to avoid confusion from legitimate land users. It would be helpful to add consistency on issues such as TMP and changing land status to wilderness.

The Department thanks the Forest for the opportunity to provide input on the LRMP and EIS. Please direct any questions regarding this letter to John Windes in our Tucson office at jwindes@azgfd.gov or 520-388-4442.

Sincerely,

/s/ *Jim de Vos*

Jim de Vos
Assistant Director-Wildlife Management

attachments

Document Review Comment Form: Arizona Game and Fish Department Coronado Forest Land and Resource Management Plan Draft EIS Comments

Page	Comment/Change Requested
28	Wild Backcountry "Suitable uses specified for the Wild Backcountry Land Use Zone are livestock grazing, harvesting of timber for restoration purposes, mountain biking, and collection of forest products and fuelwood. Off-highway vehicle (OHV) recreation, developed recreational facilities, and timber production are not suitable uses." This conflicts with the LRMP page 95 which states: "this land use zone offers similar areas that are accessed by primitive roads or motorized trails and are used for a wide variety of activities, both recreational and other, including enjoyment of scenery, escape from the crowded areas, hunting, off-highway vehicle use, dispersed camping, hiking, horseback riding, mountain biking, mining, and cutting firewood." Recommendation: The Department cannot support the first excerpt from the EIS and insists that the LRMP be reconciled with the FEIS using the definition of acceptable uses from the LRMP to include motorized dispersed camping, hunting, OHV use, and cutting of firewood.
28	Roaded Backcountry "This zone is not suitable for OHV trails". The FEIS conflicts with the LRMP, which states that the roaded backcountry is managed for a balance of dispersed motorized and nonmotorized uses. OHV trails do not conflict with this and may aid in managing this balance by separating users. Recommendation: The Department recommends reconciling the language in the FEIS with the LRMP to use the language from the LRMP.
440	Elimination of Mineral Withdrawal from the Forest Plan "Proposed Action The proposed action establishes desired conditions that support administration of mineral activities under current laws. Consistent with regulations and policy, environmentally sound minerals development is emphasized. Compliance with law and regulation is also emphasized without reiterating specific requirements. The draft revised plan under the proposed action does not list areas recommended for mineral withdrawal, but rather sets desired conditions to protect resources that are very limited or unique and that are not already protected by law, regulation, and policy for specially designated areas (i.e., wilderness). This management approach contrasts with recommendations for withdrawal made in the 1986 plan, because this approach would protect resources by means other than withdrawal." The Department finds this the most egregious failing of the EIS and LRMP. The above statement appears disingenuous and designed to mislead the public into believing that surface resources can be protected through means other than Locatable Mineral Withdrawal. The Department finds that the Forest has neglected to appropriately address protection of sensitive resources including important wildlife habitat by not describing the appropriate use of Locatable Mineral Withdrawals. The only instrument that effectively protects renewable resources from mineral entry is Locatable Mineral Withdrawal. This is the purpose of a withdrawal. Without withdrawal, sensitive resources are subject to the 1872 mining law and no amount of existing law, regulation, and especially policy, will protect those resources without mineral withdrawal. The Arizona Game and Fish Commission's policy on multiple use (A2.18) states that "Multiple-use practices must not occur at the expense of the productivity of the land, nor the sustained yield of the renewable resources." While the Department recognizes multiple use as

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	the desired manage approach to public land management, inappropriately located mines "occur at the expense of the productivity of the land." Sensitive resources must be protected through judicious use of mineral withdrawal. Recommendation: The Forest should strike all references to phasing out mineral withdrawals and should identify appropriate resources needing protection via Locatable Mineral Withdrawal.
5, 18, 48, 52	Wildlife The Wildlife sections of the plan need further review and editing by the Forest. The Department has found numerous errors and inconsistencies requiring editing. For example: In the first paragraph on page 5 the Chiricahua fox squirrel is listed as a rare species. On page 18 the fox squirrel is referred to as the Mexican fox squirrel, and at the bottom of page 33, it is listed as common in the Madrean Encinal Woodland habitat type. The Plan should select one common name for this species of fox squirrel and use that exclusively. Also, the species is not rare in the Chiricahua Mountains, but neither is it common in Madrean Encinal Woodlands on the Coronado National Forest. To be accurate, it is more commonly found in pine-oak associations solely within the Chiricahua Mountains on the Coronado National Forest. The Mt. Graham red squirrel is also listed as a rare species in the first paragraph on page 5 of the Plan, and later called a common species in spruce-fir on page 48 (second paragraph). The Mt. Graham red squirrel is listed as endangered under the Endangered Species Act and cannot be considered common. The twin-spotted rattlesnake is listed as a common species of spruce-fir habitats in the second paragraph on page 48 of the Plan. The twin-spotted rattlesnake is not a common species anywhere and is found primarily on talus slopes and should therefore be included in the Biophysical Features section starting on page 53, and not in the section noted above. Under Riparian Areas on page 52, gray hawk, elegant trogon, eared quetzal, Mexican garter snake, Wet Canyon talussnail, and Tarahumara frog are listed as common species. These are all in fact uncommon to extremely rare. Recommendation: The Forest should thoroughly review the wildlife sections of the plan in coordination with the Department. Amend the plan to use consistent naming conventions for all species. Amend the plan to replace rare species with common ones as examples where needed.
22	Goshawk Guidelines Beginning on page 22 (Mid-Scale), and throughout the document, the Plan references forest conditions in goshawk nest areas, post-fledging family areas and foraging areas. Recommendation: These are all terms and management strategies identified in the Management Recommendations for the Northern Goshawk in the Southwestern United States (1992) and should be referenced as such.

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36, 39	Inconsistencies within Vegetation Descriptions The environmental factors listed in the General Description sections for each vegetation community are inconsistent. For example, on page 36 the Madrean Pine-Oak Woodland General Description lists a fire frequency and a management indicator species (acorn woodpecker). These two elements were not identified in any of the previous Vegetation Community descriptions and an indicator species is not listed for any of the subsequent Vegetation Community General Descriptions except in the Mixed Conifer Forest and Natural/Constructed Water Sources. The Madrean Pine-Oak Woodland section does not list snag densities or tree basal area in the Desired Condition section. Though listed in all previous Vegetation Community Desired Conditions, from the Ponderosa Pine-Evergreen Shrub section on page 39 on through the Riparian Area section on page 52, the Plan does not list plant basal area, litter cover, or canopy covers. This is all valuable information relative to wildlife habitat and should be included in the Plan to assist in management and to maintain a consistent format. Recommendation: Amend plan to describe biotic communities and vegetation consistently with standard forestry metrics such as basal area, canopy cover, litter cover, etc.
40	In paragraph three on page 40 the effects of dwarf mistletoe on wildlife is difficult to gauge since it is based on the number of trees. Previous research has used a six class rating system to quantify dwarf mistletoe infection rates. Bennetts et al. (1996) found that bird species richness was positively correlated with dwarf mistletoe, which had a positive influence on wildlife habitat. They suggest that where management is not focused on timber production, control of dwarf mistletoe may not be justified, practical, or even desirable. Recommendation: Remove dwarf mistletoe abundance percentages from Desired Conditions.
51	Montane Meadows On page 51, within the Montane Meadows section, these meadows are described as vulnerable due to a changing climate since they will be susceptible to decreases in plant productivity from water limitations. On Mt. Graham many montane meadows are being used as campsites and the swift trail bisects several of them. From a wildlife habitat perspective, these meadows are important foraging areas for deer, turkey, black bear, etc. Based on their value to wildlife, fragmented nature, and the threats to their continued presence on the landscape, the Department requests additional Guidelines in this section. Recommendation: Add the following guidelines: 1. No new roads should be built in Montane Meadows and existing roads will be re-routed around them as opportunities to do so become available (this guideline is listed on page 73 under Motorized Transportation System.) 2. No new developed campsites will be authorized in Montane Meadows.

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64	Animals and Rare Plants, Desired Conditions, Wildlife Linkages. This section mentions wildlife linkages but doesn't reflect the challenges the Forest faces to improve, enhance, restore, and protect wildlife movement in the currently fragmented Ecosystem Management Areas (EMA) and along the forest boundary. Mines, powerlines, shrub-invaded grasslands, roads, trails, fences, disturbance, and development all fragment habitat and inhibit wildlife movement within the Forest. Large projects can impact movement both within and between forest blocks requiring protection of movement corridors or enhancement of landscape permeability to allow for wildlife movement throughout the forest. Examples of activities that enhance landscape permeability are the retrofitting of fences; identifying and protecting important stopover habitat for migratory birds; identifying movement corridors between critical waters for amphibians and facilitating movement to maintain metapopulations; and controlling and mitigating movement of exotic invasives. In general, wildlife movement and connectivity is poorly addressed in the Plan. Recommendation: The Forest should address wildlife movement within EMA's as well as between EMA's and suggest approaches to maintain wildlife movement corridors, standards for permeability of fencing and infrastructure, both new and existing, and guidelines for evaluating and addressing permeability in all Forest activities and those activities under permit or lease. For example, new range fencing should meet AGFD standards for permeability, old range fencing should be required to be removed or replaced, and legacy fencing should be evaluated for permeability. New roads should require means to mitigate for permeability/fragmentary effects, and current roads and infrastructure should be evaluated for permeability/fragmentary issues and opportunities to ameliorate those issues. These approaches, standards, and guidelines should be reflected in the Forest Plan.
62	Habitat Connectivity and Wildlife Linkages Generally As we have seen with the Sunzia and Southline powerline projects, regional population growth in the United States is resulting in more impacts to open space, even on public lands. The plan recognizes this and highlights these negative impacts and identifies open space as a priority. The second to last paragraph on page 9 identifies the need to protect and provide wildlife corridors between sky islands. On page 19 the Desired Condition for the Climate Change Response section is connectivity of metapopulations throughout the landscape. Similarly, the Animals and Rare Plants section on page 62 states that wildlife species are susceptible to habitat loss and fragmentation. Recommendation Areas outside the Forest Boundary which provide significant habitat connectivity should be identified by the Forest as areas in need of protection from development. For instance, the Forest participated in the Aravaipa Ecosystem Management Plan but has not identified the area between the Aravaipa Wilderness and the Galiuro EMA as an area threatened with development.
65	Guidelines for protecting northern goshawks may overly restrict human presence outside of the nesting period. Recommendation: The Department recommends providing a citation for a need to restrict human disturbance after August 1 as fledged young are typically independent before the month of August.

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66	Invasive Species Within the Grassland Communities, Madrean Encinal Woodland, Wetlands, and Riparian Areas sections, there is no Guideline or even Management Approach listed for dealing with exotic species other than bufflegrass. Recommendation: Other invasive species such as Lehmann lovegrass, salt cedar, and sweet resin bush should be specifically targeted for treatments within the Invasive Species section, page 66.
70-71	The Department supports the progressive standards and guidelines the Forest has outlined for public access to the Forest. The Department supports the Forest's proactive measures to protect public access. Recommendation: The Department recommends maintaining the Standards and Guidelines for this section.
73	Standard 1: "Motor vehicle use is allowed on the designated system of roads and trails" and is "prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions." Page 71 states "The motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval." Recommendation: The forest should strike (or modify) Standard 1 as it appears to contradict the previous statement (p71) which allows designations to be made via MVUM's and travel management plans. The Forest should amend the plan and DEIS to allow motor vehicle use off the designated travel system limited to single trip use to retrieve legally taken mule and whitetail deer where such use does not negatively impact soils or vegetation. The Forest has stated in Travel Management meetings with the Department that authorized roads without legal access across State Trust Land must be removed from the system. The Department recommends the Forest reverse this position and add a guideline to the plan stating "all authorized roads connecting to existing roads on Arizona State Trust Land (STL) over which the Forest has not legal easement or right of way across STL will be maintained as part of the designated road system as long as users may legally use the those roads with an Arizona State Land recreation permit."
73	The Department supports the publication of motor vehicle use maps (MVUM) as one means of educating and informing the public of the designated road system. However, for all practical purposes open roads should be numbered and signed and closed or restricted roads should be physically closed or gated. The casual and occasional forest visitor cannot be expected to possess and understand MVUM's and the Department does not support MVUM's as the primary indicator that any given route is legal or illegal for travel. Recommendation: The Department recommends adding as a guideline that all roads open to the public be numbered and signed and that all closed roads be physically closed with native material or gated and signed closed. All roads maintained for administrative access only should be gated and signed for authorized use only.

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82	It is difficult to assess cumulative impacts of infrastructure on wildlife without a map showing existing infrastructure. Recommendation: To assist in evaluating cumulative impacts on wildlife, a map of existing utility/energy corridors should be included in the plan and referenced under #2 on page 82.
83	Standard 3.f. requires all new and replacement towers to be self-supporting due to the reasoning that self-supporting towers "minimize land area impacts." Recommendation: Move to guidelines and specify that the least impacting method should be used.
82	Standard 3. g. requires new and replacement antennas and towers to be below the height for which FAA requires lights because of the interference with the fire lookout tower "and aesthetics." i. requires towers meet color requirements set forth in the Coronado's Guidelines for "Recreation Residences." The Department questions why the guidelines meant for recreational residences is being used for very different structures and suggests that these guidelines are ill suited for this purpose and that perhaps towers and antennas should not be regulated under the same guidelines as recreational residences. Commercial and scientific towers and antennas can be deadly hazards to Department aircraft which often fly closer to the ground than most aircraft as regulated by the FAA due to the needs of surveying wildlife and other wildlife management activities which occur regularly and frequently. Moreover, these antennas may be hazardous to USFS aircraft fighting fires. Recommendation: These standards should be deleted and/or changed. The Department requests that the safety of our personnel and USFS personnel be placed above that of aesthetics and that all towers and antennas be required to be visible from the air and be painted to contrast with the ground or background when viewed from above or at height or otherwise marked or lighted to ensure visibility by low flying aircraft. The following language is taken from AGFD wind guidelines, and can be adapted for this section:
82 (cont.)	**APPENDIX C: Guidelines for Installation and Monitoring of Meteorological Towers and their Associated Infrastructure** Met towers (whether temporary or permanent) and their associated infrastructure have the potential to cause avian and bat mortalities resulting from mid-flight strikes with the tower guy wires. Studies have shown guy-wired towers can cause four times more bird mortality than towers without guy wires (Young et al., 2003) (http://www.west-inc.com/reports/fcr_final_mortality.pdf). While bats can also strike guy wires, the occurrence is much less frequent. In addition, the visibility of met towers is important for the safety of aircraft pilots at low flight elevations. To reduce the potential for bat and bird collisions, and to provide guidance for keeping pilots and personnel safe, AGFD has developed these recommendations: AGFD requests all *permanent* met towers be unguyed, free standing structures. If monopole are not practicable, then free standing lattice towers with perching deterrents may suffice. If possible, AGFD also requests temporary met towers be unguyed, monopole, free standing structures.

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	When guy wires are present, AGFD recommends attaching Bird Flight Diverters (BFDs) at spaced intervals along the length of multiple wires. At a minimum, four Aircraft Warning Markers (spherical or cylindrical, 36 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire. Research shows the attachment of BFDs can reduce bird collisions by as much as 86-89 percent (Pope et al., 2006) (http://www.chelanpud.org/documents/Burch_Final_Report_Vl.pdf). AWMs should be recognizable from a distance of at least 4,000 feet (1219m) in clear air and visible from all directions. AGFD recommends all temporary towers are only on site for the minimum amount of time needed to monitor the wind resource. If towers are on site for more than 1 year, AGFD recommends carcass searches be implemented, especially during the bird migration period (see Chapter 5, Post-construction Monitoring and Reporting). If a temporary tower is going to become a permanent structure for the life of the project, AGFD recommends the tower(s) be included as part of the longer term (pre-construction and post-construction) monitoring program. AGFD recommends the applicant place acoustic monitoring stations on met towers in the proposed project area (Note: This will help collect bat activity information needed for pre-construction analysis). An acoustic monitoring station is defined as two acoustic detectors, one at "ground level" (approximately 1.5 meters above ground) and the other with an elevated microphone, ideally within the future rotor swept zone, but not less than 30 meters high. Reynolds (2006) and Lausen (2006) provide detailed guidelines for detector deployment and operation. Rainey et al. (2006) provides an in depth discussion of acoustic monitoring systems. Acoustic data collection objectives should strive to evaluate bat species composition and bat use of the project area nightly and across seasons to assess potential impacts.
82 (cont.)	Work with AGFD to determine the number of acoustic monitoring stations needed to adequately cover the project area. The number of acoustic stations will depend on project footprint and habitat complexity. When siting met towers, avoid habitat features that congregate wildlife such as water resources, habitat edges, ridgelines, etc. At a minimum, AGFD recommend 100m setbacks from these features. This varies site to site dependent on the combination geographic features and wildlife resources. **AGFD Personnel Safety** Low-level aerial flights can occur outside routine wildlife survey routes. GPS locations of all towers need to be provided to AGFD prior to construction to allow survey aircraft to avoid the towers. In addition, AGFD requests project proponents notify the Department when met towers are removed. When guy wires are present, AGFD recommends attaching Bird Flight Diverters (BFDs) at spaced intervals along the length of multiple wires. At a minimum, four Aircraft Warning Markers (spherical or cylindrical, 36 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire. AWMs should be recognizable from a distance of at least 4,000 feet (1,2l9 m) in clear air and visible from all directions. For all monopole towers, paint the top 30 feet of the tower in alternate orange and white paint. This does not apply to lattice towers or lit towers, both of which are more visible than monopoles. **14. "Limit nonpedestrian activities (e.g. bicycle and equestrian) authorized under special use permits to existing National Forest System trails and roads."** The Department questions the need for this standard. Would this limit hunting guides using pack animals and horses to trails and roads? The Department suggests that the variety of

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	activities permitted under special use permits is great enough that this standard is unnecessarily restrictive and that such special use permits should evaluate uses on a case by case basis. The Department does not support limiting all "nonpedestrian" special use activities to trails and roads. This would also seem to limit the use of game carriers by licensed guides and outfitters to trails and roads. Recommendation: The Department recommends striking this standard and instead clarifying in guidelines or management approaches which activities should be limited to roads and trails and ensuring that licensed hunting guides and outfitters can utilize equines and game carriers off-trail.
88	Grazing Guidelines Recommendations: 1. Add Santa Teresa and Pinaleño Mountain Ranges to areas restricted from domestic goat permits. Bighorn exist in the Santa Teresa Mountains, sufficiently close to the Santa Teresa's for goats to pose a threat. 4. Wildlife Fencing standards should be consistent with the State's Guidelines for Wildlife Compatible Fencing, not meet AGFD wildlife water standards. The Guidelines are currently found at the following web location: ttp://www.azgfd.gov/hgis/documents/110125_AGFD_fencing_guidelines.pdf
92	Locatable Mineral Withdrawals This guideline seems intended to discourage locatable mineral withdrawals. The Department is concerned that this guideline will unnecessarily hinder wildlife habitat protection efforts. Recommendation: The Department recommends removal of the guideline.
93	Locatable Mineral Withdrawals The Department finds that a major flaw in the DEIS is the lack of a description of what areas are withdrawn from Locatable Mineral Exploration and development, which areas are recommended for continued withdrawal, and which areas are recommended for or potentially recommended for revocation. Recommendation: The Forest should thoroughly describe existing and potential locatable mineral withdrawals and potential withdrawal revocations.
93	The Department finds that the Forest has neglected to appropriately address protection of sensitive resources including important wildlife habitat, by describing the appropriate use of Locatable Mineral Withdrawals. The only thing that protects resources from mineral entry is Locatable Mineral Withdrawal. This is the purpose of a withdrawal. Without withdrawal, sensitive resources are subject to the 1872 mining law. Recommendation: The Forest should prescribe Locatable Mineral Withdrawal as an appropriate means of conserving and protecting unique and sensitive resources and should list all special designations which should be withdrawn from locatable mineral exploration and development. The Locatable Mineral Withdrawals section on page 93 should also include, within the first bullet statement, EMA corridors as examples of unique resource areas.

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93	Locatable Mineral Withdrawals a. "Preserving a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development" This language appears to overly restrict the use of Locatable Mineral Withdrawals to protect unique or sensitive resources. Recommendation: The Department recommends striking the first sentence in section "a" and replacing with language similar to "utilize locatable mineral withdrawals to preserve unique and sensitive resources where mineral development will cause undue damage or irreversible impacts to those sensitive resources." The Department further recommends revising the second sentence to read "Examples of unique and sensitive resources are research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and crucial wildlife habitat areas.
104	Wildlife in Wilderness Within the Wildlife in Wilderness section on page 104, the Standards and Guideline all refer to wildlife decisions that are not under federal authority. Any wildlife introductions or reintroductions are decisions of the Department's and not subject to the US Forest Service or a Land and Resource Management Plan. As stated in the Wilderness Act of 1964, "Nothing in this Act shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to wildlife and fish in the national forests (16 U.S.C. 1133)." Recommendation: These Standards and the Guideline must be removed. Similarly, on page 129 under the Chiricahua EMA, Standard 2.a. states that a special use permit is required for any animal collection. Once again, this is the purview of the Department and not the Forest, whether through the issuance of a hunting permit-tag or a scientific collecting permit. This Standard must be changed.
104	Standard 1 "Nonnative species shall not be introduced into any wilderness area" Standard 2 "Reintroductions shall only occur when a species is determined to be indigenous to the area and when it was extirpated by human-induced events." These two standards are unnecessary and may create problems with differing definitions of "native" and "indigenous." The Department, which has management authority over wildlife, manages for some nonnative species on the Coronado Forest. This standard unnecessarily puts the Forest and the Department at odds over management authority of state trust responsibility species on federal lands. Moreover, some species may not be considered "native" or "indigenous" because they are not genetically pure strains or because said species cannot be definitively shown to occur in the habitat where reintroductions occur. For instance, in the Pinaleños, five species of trout are currently managed by the Department. Two of these are "native" to Arizona, but one of these species may be a different race than historically occurred in the Pinaleños, and one or all may be considered "nonnative". The Department recognizes that often the indigenous species is the most obvious choice for reintroduction but sometimes there are reasons why this is impossible or ill-advised. In some cases, native species may have been extirpated but similar species may fill an important ecosystem niche. This is especially true when taxonomic classifications are continually changing. Ramsey Canyon leopard frogs are now considered the same species as Chiricahua leopard frogs and this species is currently in flux and likely will continue to be. Other species this could cause issues with are pronghorn antelope, dusky grouse, Gila trout, Apache trout, and many others.

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	Making a standard that reintroductions *shall only occur when* a species is determined to be extirpated by human-induced events is biologically ignorant and practically infeasible. Such a standard is designed without regard to the reality of the limits to scientific knowledge. All extirpations are likely to be the result of complex interactions from a number of factors. Quantification of the importance of any one of those factors, including anthropogenic influence, in the extirpation of a species would be extremely difficult if not impossible given the state of our knowledge. Recommendation: Strike Standard 1 and Standard 2 from Wildlife in Wilderness.
104	Wildlife in Wilderness Guideline Recommendation: Language within this guideline should mirror the Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (FS, BLM, and AFWA-June 2006).
106	Land Ownership and Boundary Adjustment in Wilderness Recommendation: Standards - Add Standard: "Locatable Mineral exploration and extraction will be disallowed through withdrawal."
114	Recommendation: Add this management approach: "Ensuring enforcement of restrictions on dogs in the bighorn sheep special management area within the Pusch Ridge Wilderness Area."
116	Recommended Wilderness and Wilderness Study Areas The Arizona Game and Fish Department has experienced restrictions resulting from Special Land Designations (specifically wilderness) including project delays, increased costs, increased man-hours, etc. This ultimately leads to decreased efficiency in protecting and managing Arizona's wildlife resources. Language within the plan should recognize that, as habitats become more restricted and fragmented, proactively managing fish and wildlife is necessary and justifiable in these areas to maintain and enhance populations and biological diversity. The Department supports a level of protection which maintains wildlife values, yet allows flexibility in management as a preferred strategy for the management of public lands. The Department, therefore, does not support designation of additional Wilderness areas. Some activities that the Department would want allowed in any special designation for areas identified as having Wilderness values include: • Hunting as regulated by the Department throughout the designated area, without special limitations • Wildlife surveys, including motorized vehicle and equipment use when appropriate such as the use of planes and helicopters, helicopter landings in remote areas, and chainsaw use to clear deadfall from trails needed for management purposes. • Wildlife management, including: introduction of native species; removal of undesirable species; use of planes and helicopters; helicopter landings in remote areas; use of motorized vehicles and equipment; capture, marking, collaring and radio-tracking of animals; development and maintenance of physical structures (e.g. bat gates or riparian exclosures) • Wildlife water development and maintenance, including temporary motorized vehicle use, plane or helicopter use, and use of motorized equipment for specific projects.

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	• Stream renovation, including chemical removal of exotic fish and reintroduction of native fish, use of motorized vehicles and equipment, development and maintenance of physical structures to manage fish populations. • Habitat management, including removal of exotic plants, timber or fuel wood removal, brush removal, prescribed fire, etc. This section should refer to the Memorandum of Understanding between the USFS Southwest Regional Office and the Department, and to its attached *'Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness'* (June 2006). Recommendation: The Department recommends that an alternative be developed which uses alternate means than Wilderness to protect large areas of the Forest from the threat of single use development and that this alternative make judicious use of those means. The Department further recommends that the Forest thoroughly analyze the hindrance Wilderness might impose on managing for climate change.
116, 129, 152	Comments on Specific Wilderness Areas The Plan recommends two additions to the Wilderness system; The Ku Chish Wilderness Area (WA) at the north end of the 152 Chiricahua Mountains, and the Mt. Graham WA. Mt. Graham has been a Wilderness Study Area for 30 years and therefore managed as a de facto WA. The map for this WA in the Plan is difficult to decipher. Based on participation with the Forest on travel management planning (TMP), the Mt. Graham Wilderness Study Area has roads "cherry-stemmed" into the interior of the Study Area at Carter Canyon, Nuttall Canyon, and Frye Mesa. The Department recommends these remain open, as well as extending the length of the road in Carter Canyon an additional 1.09 miles (converted to non-motorized use in the TMP process). Regarding the Ku Chish; there is one road decommissioned by TMP within the WA (4223), but the Department's understanding is that the road is out of service. Another road in Emigrant Canyon (255) needs to remain open and not be impacted by WA designation. Again, it is difficult to see how the proposed map interacts with these roads. An additional Management Approach added on page 129, stating that the Forest will collaborate with state and federal wildlife agencies to restore fish and wildlife populations, would enhance our efforts at Gould's turkey, native fish, and Chiricahua leopard frog reintroductions in these areas. Recommendation: The Forest should amend the EIS to show the cherry stemmed areas on the map, which should include the additional 1.09 miles in Carter Canyon. The Road in Emigrant Canyon needs to remain open and the EIS should show this. The Forest should add an additional Management Approach on page 129 stating that the Forest will collaborate with state and federal wildlife agencies to restore fish and wildlife populations.
117	Desired Conditions in Wilderness and WSA's The Department is concerned that thriving wildlife and fish populations are not mentioned in the Desired Conditions section. The Department has experienced issues with other plans when wildlife and fish are not mentioned in the Wilderness section as this has been interpreted that those are not a high priority. Recommendation: Add the following to Desired Conditions: 1. Wildlife and Fish populations are healthy, robust, and thriving and do not show a trend toward decline or loss of diversity. 2. Wildlife populations are critically important components of naturalness (and, therefore, of wilderness character) in Arizona's wildernesses.

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117	Wilderness Standards Recommendation: Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal." Add Standard 3. "Ecological integrity, including maintenance and enhancement of native fish and wildlife values will be prioritized over aesthetic values."
117	Wilderness and WSA Guidelines Again, Wildlife and Fish are missing from the Guidelines as high priority Wilderness values. Recommendation: Add Guideline: "Wilderness Study Areas, recommended Wilderness, and Designated Wilderness Areas will be managed to maintain and enhance wildlife and fish populations at optimal levels as a high priority Wilderness value."
119	Wild and Scenic River Desired Conditions Wild and Scenic rivers are extremely important native fish and aquatic wildlife habitat. Native fish and wildlife management must be recognized in the Forest Plan as a high priority resource need in any Wild and Scenic desired conditions to avoid situations where other resource needs and human aesthetics trump survival of imperiled fish and wildlife. The Department fully supports the following: "Aquatic habitat is maintained in a condition with low substrate embeddedness, abundant aquatic food supply, and stable streambanks." However we recommend adding further clarification. Recommendation: Add the following to Desired Conditions: “Where desired, native fish and wildlife populations are thriving without threat of competition from non-native competitors. Aquatic habitat and desired fish assemblages are maintained using methods that may include fish surveys, non-native fish removal utilizing nets or battery or gas powered electrofishing equipment, construction and maintenance of fish barriers, and chemical renovations.”
119	Wild and Scenic River Guidelines The Department is concerned that Wild and Scenic River designation may inhibit our ability to manage for native fish in the most effective and efficient manner. Recommendation: Add Guideline: "For all Wild and Scenic River designations, full consideration will be given to the potential impacts on the ability of the Forest and the Arizona Game and Fish Department to efficiently and effectively manage fish and wildlife resources to maintain and enhance fish and wildlife values associated with the rivers. Specific management actions to maintain and enhance fisheries values may include such activities as fish surveys, non-native fish removal utilizing nets or battery or gas powered electrofishing equipment, construction and maintenance of fish barriers, and chemical renovations."
119	Wild and Scenic Rivers Standards Recommendation: Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal." Add Standard 3. "Ecological integrity, including maintenance and enhancement of native fish and wildlife values will be prioritized over aesthetic values."

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122	"Salable Minerals extraction will not be allowed." Recommendation: Certainly these areas warrant protection from mining exploration and mining for locatable minerals. The Department recommends the Forest amend the plan to withdraw all specially designated areas from mineral exploration and extraction. Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal."
126	The proposed designation of the Cave Creek Canyon Birds of Prey Zoological-Botanical Area and the extension of the Pole Bridge Research Natural Area (RNA) should not affect Department operations. Recommendation: The Department supports these designations.
129	Chiricahua EMA, Standard 2.a. states that a special use permit is required for any animal collection. This appears to usurp state authority contrary to State and Federal Law, the Department's MOU with the Forest, and contrary to the Wilderness Act as stated above. The Arizona Game and Fish Commission asserts sole authority to issue permits for collection and take for all state trust responsibility species, i.e. all wildlife species not expressly under the authority of the federal government. Recommendation: Strike "animal" from Standard 2.a.
142	Tumacacori EMA Standard 1.a. "A special use permit is required for any plant or animal collection" This appears to usurp state authority contrary to State and Federal Law, the Department's MOU with the Forest, and contrary to the Wilderness Act as stated above. The Arizona Game and Fish Commission asserts sole authority to issue permits for collection and take for all state trust responsibility species, i.e. all wildlife species not expressly under the authority of the federal government. Moreover, the purpose of this special designation area is not for the purpose of greater management of state responsibility wildlife species. Recommendation: Strike "animal" from Standard l .A.
155, 156	Goudy Canyon RNA Recommendation: Standard l.a. on page 155 regarding the Goudy Canyon RNA should indicate that prescribed fire to enhance wildlife habitat would be allowed. Bulleted statements 1, 6, and 7 under Management Approaches on page 156 are redundant.

Page	Comment/Change Requested
167, 88	Climate Conditions and Trends Consistency-Range Management In Chapter 5, Suitability, the second paragraph under Grazing Capability and Suitability on page 167 states that current climate conditions and trends are not outside of historical norms. This is completely contradictory to the beginning of Chapter 2 and Appendix A, which identifies climate change as a major concern within the plan and identifies a potential decrease in forage and water for livestock (pg. 18). It then goes on to state that forage productivity is not currently mapped at a fine scale and not used in range capability determinations. Recommendation: The Department recommends revising Chapter 5 and adding mapping of forage productivity to aid in management as a Desired Condition within the Range Management section on page 88.
179	Natural Water Sources In the Monitoring section on page 179, under Natural Water Sources, the Monitoring Question posed is how many springs have been developed for species recovery? This seems contrary to the Natural Water Sources Objectives on page 57 that identify reconstructing only developed springs, and the Guideline on page 58 to protect natural springs and seeps. Recommendation: This Monitoring Question should be restated as, "How many stream restoration/development projects and spring reconstructions have been completed for the recovery of species of conservation concern?"
204	The second paragraph on page 204 lists the Aspen fire of 2003 as the largest on record in the Coronado National Forest. That is no longer accurate as the Horseshoe 2 fire was nearly three times that size. Recommendation: The plan should be reviewed for errors, consistency, and accuracy by multiple disciplines before finalization.

Arizona Department of Environmental Quality

Arizona Department of Environmental Quality
1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov

November 27, 2013

Mr. Jim Upchurch
Coronado National Forest Supervisor
Coronado Forest Plan Revision
P.O. Box 1919
Sacramento, CA
9S812

RE: Coronado National Forest: Proposed Land Management Plan and Draft Environmental Impact Statement

Dear Mr. Upchurch:

The ADEQ Air Quality Division has reviewed your letter received November 15, 2013, concerning the Proposed Land Management Plan and Draft Environmental Impact Statement you submitted for a General Conformity Determination with the Arizona State Implementation Plan in accordance with Clean Air Act § 176(c)(l); Title 40 Code of Federal Regulations Part 93, Subpart B §§ 93.150-165; and Arizona Administrative Code R18-2-1438 (approved into the Arizona State Implementation Plan April 23, 1999; effective June 22, 1999). Portions of the Tumacacori EMA that are within the State of AZ and lie within townships: T23S, Rl3E; T24S, Rl3E and lie east of 100 degrees longitude are located in nonattainment areas for 10-micron particulate matter (PM_{10}) and 2.5-micron particulate matter ($PM_{2.5}$). Portions of the Santa Catalina EMA that lie within T9S, R15E; T9S, Rl6E; T10S, R15E; T10S, R16E; T11S, R16E are located in a maintenance area for sulfur dioxide (SO_2).

The Air Quality Division has concluded that a General Conformity Determination is not required for the following reason:

X Project's total emissions of each identified air pollutant to be emitted from the project would be less than *de minimis* levels in Title 40 CFR § 51.853(b) [and §93.153(b)] as described or calculated.

Very truly yours,

/s/ *Diane L. Arnst*

Diane L. Arnst, Manager
Air Quality Legal Support Section

cc: Sherri Zendri, Administrative Counsel Lhamo LeMoine, Administrative Secretary File No. 317810

Arizona Department of Transportation

Arizona Department of Transportation
206 S. 17th Ave.
Phoenix, AZ 85007
azdot.gov

February 20, 2014

Coronado Forest Plan Revision
P.O. Box 1919
Sacramento, CA 95812

Dear Coronado National Forest staff:

Subject: Review and comment on the Land and Resource Management Plan and DEIS

Thank you for the opportunity to review and comment on the Coronado National Forest (CNF) Draft Land and Resource Management Plan and Programmatic Draft Environmental Impact Statement (DEIS). The Arizona Department of Transportation (ADOT) having reviewed the draft plan, DEIS, and associated documents, believes that the plan is compatible with the accomplishment of its immediate operational needs.

We offer a few general and specific comments on the plan for your consideration:

- Access improvement and mobility are discussed as strategic issues but somewhat lightly. In planning terms, noting no particular time frame, we suggest that these items be highlighted in the final Land Management Plan:
    - SR92 has been widened to five-lanes from Sierra Vista south through Hereford all the way to Hunter Canyon. Eventually, this corridor will need to be widened further south towards Palominas as the population in the San Pedro River Valley grows. ADOT will include the US Forest Service as well as other stakeholders in its NEPA-based scoping and design efforts when the time comes.
    - SR266 is an old route which functions relatively well now but it does have certain safety issues due to geometry, high embankments, etc. As the population in the Sulfur Springs Valley (Willcox - Bonita agricultural areas) has increased, there has been growing pressure to address these safety concerns such as constructing shoulders, installing guardrail, and so on. Again, ADOT will include the US Forest Service as well as other stakeholders in our scoping and design efforts satisfactory to our NEPA requirements when the time comes.
    - SR366 is another historic route serving a variety of stakeholders in a sensitive area. Called Swift Trail Parkway, it is one of three state routes that carry the "trail" moniker. SR366 is also the highest route in the state system and so passes through several life zones. Strategically, there has been growing impetus to pave the last seven miles of SR366 to help maintain the roadway in a cost-effective manner and prevent environmental degradation due to soil erosion and watershed impacts. We acknowledge that the concerns of wildlife protection advocates and tribal representatives need to be addressed in a proactive manner compliant to NEPA requirements.

All three of these routes (SR92, SR266, and SR366} have been closed at times due to fires. They represent important and reliable routes not only during routine conditions, but during emergency situations when fire fighters need access and those being evacuated need a means to get out. Maintaining this ability is important in developed areas and critical along urban interfaces.

- Sustaining ADOTs ability to maintain, rehabilitate, and/or enhance existing roads, highways, and associated infrastructure on the CNF is of paramount importance, not only to the agency but the people they service. ADOT respectfully requests that the CNF maintain existing transportation easements on its lands by refining the margins of any existing or proposed Designated Areas and Special Places (e.g. Botanical Area, Research Natural Area, Wilderness, or Zoological Botanical Area} such that they not overlap or impinge upon these transportation easements in any way that would interfere with their purpose.
- Please note that the ADOT Five-Year Program, described on Appendix B of the DEIS, serves as a blueprint for future projects and designates how much local, state and federal funding is allocated for those projects. It is divided into three sections: the Maricopa County region, the Pima County region and the 13 counties that make up Greater Arizona. Since the Five-Year Program is updated annually, it may be more instructive to provide more recent example transportation projects planned in the vicinity of the CNF as well as a link to its most recent incarnation: http://azdot.gov/planning/transportation-programming/current-program

Please feel free to contact me or Ron Tiller, Environmental Planner, at 602-712-8635 with any questions regarding our comments.

Sincerely,

/s/ *Paul O'Brien*

Paul O'Brien
Environmental Planning Group Manager

cc: Bill Harmon

Arizona State Forestry Division

Arizona State Forestry Division
Office of the State Forester
1110 W. Washington St., Suite 100
Phoenix, AZ 85007
(602) 771-1400

March 6, 2014

Jim Upchurch Forest Supervisor
Coronado National Forest
300 W. Congress St
Tucson, AZ 85701

Re: Draft Coronado National Forest Plan Comments Dear Mr. Upchurch:

Below, please find a series of comments about the Draft Coronado National Forest Plan that is open for review. Arizona State Forestry appreciates the opportunity to respond and submit comments.

Page 10:

> "Develop management approaches that emphasize collaboration."
>
> We support this approach and would like to be included when appropriate in the collaborative planning and implementation.

Page 23:

> We agree that the wildland-urban interface "may be particularly susceptible to increase in severity and intensity of wildland fire…." In addition, we support the Desired Conditions:
>
> > "As a result of vegetation management, most wildfires in the wildland-urban interface are low-to-mixed severity fires that result in limited loss of structures or ecosystem function. Patterns of treatments are effective in modifying fire behavior."
> >
> > "Wildland-urban interface residents and visitors are knowledgeable about wildfire protection measures for their homes and property, including defensible space."
>
> However, we want to caution against interpreting this as a mandate to act that might lead to actions that are over ambitious or under conditions that are less than ideal, particularly if unplanned ignitions are used as a tool.

Page 24:

> We generally support the objective to treat 5,000 to 10,000 acres every year in the wildland-urban interface. We have concern and ask you to use extreme caution if planned ignitions are going to be used as a vegetation manipulation tool in the wildland-urban interface.

We are even more concerned about the use unplanned ignitions as a tool in the wildland-urban interface. Please reconsider this objective.

For the use of planned ignition, and if unplanned ignition in the wildland-urban interface remains allowable in the final document, please include strict standards to regulate this practice and guarantee protection of private property and lands, as well as State Trust lands.

Community wildfire protection plans must be approved by the State Forester. It would be good to highlight this in your document. We look forward to assisting in development and implementation of these community wildfire protection plans.

Page 26:

We support the objective to "Suppress or eradicate buffelgrass on 1,000 to 1,500 acres of Sonoran Desert every year using herbicides and manual methods." However in the following guidelines it states: Wildland fire…should not be used as a management activity in desert communities, except as a strategy to control invasive vegetation."

Most current literature suggests that fire favors continued persistence and spread of buffelgrass over native desert plants. Therefore, we would discourage the use of fire as a tool to control this invasive vegetation.

In addition, we would like to suggest State Forestry, other federal agencies, and local communities work collaboratively to address problems of invasive plants across ownership boundaries and on a landscape scale.

Acres of treatment included as objectives

Vegetation Type	Acres of treatment using wildland fire (planned and unplanned ignitions), thinning, and
Grasslands	Every 10 years, at least 72,500
Interior Chaparral	Every 10 years, at least 5,000
Madrean encinal woodlands	Every 10 years, at least 367,000
Madrean pine-oak	Every 10 years, at least 25,000
Ponderosa pine-evergreen shrub	Every 10 years, at least 12,500
Dry mixed conifer	Every 10 years at least 13,800
Wet mixed conifer	Every 10 years, 2,400
Total	At least **498,200**

The objectives in the plan propose at least 498,200 acres of treatment every 10 years. We applaud your desire to accomplish this ambitious objective.

It is unclear if these acres include the proposed treatment of 5,000 to 10,000 acres per year in the wildland-urban interface and the 2,500 to 15,000 acres every 10 years in the uplands. Would you please clarify this in the final document?

For this ambitious level of treatment it appears the planned and unplanned ignition are likely to be a commonly used tool. With this tool, we request that strict standards which assure the protection of private property and lands, local communities, and State trust land be included in the final document.

Page 170-171:

The discussion of Suitable and Unsuitable timber is confusing. It appears that you have developed a new designation "tentatively suitable" based upon timber harvest not being "cost effective in meeting timber production objectives."

In *FSH 1909.12-2006-7 section 62.2 - Identification of Lands Generally Suitable for Timber Harvest*, there appears to be direction that "All lands that do not meet the circumstances described in section 62.1 should be identified as lands generally suitable for timber harvest."

Section 62.1 - Identification of Lands Generally Not Suitable for Timber Harvest states that there are only 4 reasons to classify lands as not suitable, they include:

1. "Statute, Executive order, or regulation prohibits timber harvest on the land, or the Secretary of Agriculture or the Chief of the Forest Service has withdrawn the land from timber harvest as described in section 62.11.

2. At the broad forest scale, the Responsible Official estimates that soil, slope, or other watershed conditions will be irreversibly damaged by timber harvest as described in section 62.12.

3. At the broad forest scale, the Responsible Official estimates there is no assurance that such lands can be adequately restocked within five (5) years after harvest as described in section 62.13.

4. Trees are unable to grow due to environmental conditions (such as insufficient rainfall, low temperature, or other growing conditions preventing the establishment of tree cover)."

Given this direction, it is unclear how you arrived at the determination "0" acres of suitable timber and at the determination of 45,674 acres of "tentatively suitable timber."

This designation seems important because it would be reasonable to anticipate that in the future a small enterprise might want to move in, or a different technology or use be developed, that might make the timber production cost effective.

We look forward to assisting your efforts to find enterprises that might be a good fit for the level of fiber production that you have available.

Again, thank you for the opportunity to provide comments on your draft plan. Overall, the plan seems well thought-out and well organized. Please accept these comments and we hope to work with you in the future.

Sincerely,

/s/ *Jerry Payne*

Jerry Payne
Deputy State Forester

James Cogswell
State Historic Preservation Office
Arizona State Parks
1300 W. Washington
Phoenix, AZ 85007

[Submittal of form from Coronado National Forest regarding the format in which people would like to receive the draft environmental impact statement and draft revised plan.]

I would like to request the following:

CD with the Coronado National Forest Draft Forest Land and Resource Management Plan and Draft Environmental Impact Statement.

Cochise County and City of Sierra Vista

Darling Geomatics
University of Arizona Science and Technology Park
9040 South Rita Road, Ste #2350
Tucson, AZ 85747

March 6, 2014

USDA, Forest Service Coronado National Forest
Email: CoronadoNF@fscomments.org

RE: Coronado National Forest Plan Revision Comments - Cochise County and City of Sierra Vista, Arizona

On behalf of Cochise County (County) and the City of Sierra Vista (City), please consider the following comments in this letter including Attachment A regarding the Coronado National Forest Land and Resource Management Plan Revision and Draft EIS (LMP/EIS).

The City and County have standing due to proximity to the Coronado National Forest and potential economic, social, custom and cultural impacts that would be incurred as the result of the proposed LMP Revisions. All previous comments by the City and County including their represented input to the Travel Management Collaborative Alternative Team (CAT) process are herein incorporated by reference.

The key concern of the County and City is that the Coronado National Forest failed to coordinate during preparation of the LMP/EIS. The Forest is planning major federal actions that could have significant adverse impacts to the economies of the local area without the legally required coordination. The CAT process is not deemed "coordination" by the County and City as it was an experimental "consensus" process. Most parties failed to reach consensus on the majority of roads, thus the process failed and decisions were deferred to District Rangers.

The County and City appear to have been treated as part of the "public" in the Forest LMP Revision process, with no consideration of their responsibilities to provide for the health, safety, and welfare of their constituents. Major changes in Forest Service policy and management direction regarding roads, sustainability of land uses, fire management, etc. will impact the ability of the County and City to fulfill their legal responsibilities.

Though required by law, no consistency analysis was presented to address differences between proposed Forest LMP actions and local plans, regulations, laws, and policies. The proposed revisions in the LMP are inconsistent with the Cochise County Comprehensive Land Use Plan and City of Sierra Vista plans.

The City and County request Coronado National Forest line officers and planning staff meet with County and City officials including managers, planners, transportation and public works engineers, natural resource consultants and other key personnel to assure the Forest LMP is consistent with existing local City and County plans. Any inconsistencies need to be addressed. The Forest Service needs to work with local government before the Revised LMP process continues.

Please contact James Vlahovich at JVlahovich@cochise.az.gov to set up meetings. Thank you.

Respectfully submitted on behalf of Cochise County and the City of Sierra Vista by:

/s/ *Mary E. Darling*

Mary E. Darling, MS, JD[1/]
Darling Geomatics
Natural Resource Consultant
[1/] Acting as a Biologist, not an attorney

Attachment A: Table of Comments

Attachment A
Coronado National Forest
Proposed Revised Land and Resource Management Plan
and Environmental Impact Statement
Dated October 2013

Comments by Cochise County and the City of Sierra Vista, Arizona (Consultants Kim Mulhern, RG, and Mary Darling, MS JD), Dated March 6th, 2014

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
1	Roads	We request a meeting as soon as possible to coordinate travel management needs of the County and City with those of the Forest Service. As noted in Item 2 below, the County Comprehensive Land Use Plan has very specific direction on road closure and changes in road maintenance levels. We understand that broad policies on travel management plans will be made at the Forest LMP Revision/EIS level and that more detailed plans will be made during individual NEPA assessments at the District level. Since there are four Coronado National Forest Service Districts that overlap Cochise County, we request a meeting with the Forest Supervisor and District Rangers from each of the four Districts. We also request specific details of how cooperating agency status will be implemented at the District level to review all NEPA documents in administrative draft form in order to provide valuable input to the Forest Service regarding the health, safety, and general welfare as well as social, economic, and cultural significance of various roads within the County and City.
2	General/Coordination	Please address the following items from the Cochise County Comprehensive Land Use Plan and perform the requisite consistency analysis: Goal: To protect the culture, history, economy, environment and lifestyles of Cochise County residents by requiring federal agencies to coordinate land use plans with Cochise County and to establish plans that provide for continued multiple use of public lands consistent with the following policies: Comment: By becoming a participating and coordinating agency, Cochise County is guaranteed a "seat at the table" in the preparation of Environmental Assessments (EAs), Environmental Impact Statements (EISs) and other federal land use considerations that have the potential to affect the cultural, historical, economic and environmental character of the County, and to preserve traditional rural ways of life, including farming, ranching and other agricultural-related activities in the County. In addition, however, the County seeks to require federal agencies to establish plans consistent with County policies by requiring them to coordinate with County government. To that end, the following policy statements were developed regarding various public land management issues:

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
2	General/Coordination (continued)	Other Designations *A. Wilderness Designation* 1. Any consideration of any new wilderness designations of federal lands in Cochise County will be a result of a collaborative process, including federal, state, and county officials. 2. The only legal designations of Wilderness Study Areas (WSA) are those designated under section 603 of the Federal Land Policy and Management Act (FLPMA) and the opportunity to create additional wilderness ended in 1991, except as authorized by Congress; any new wilderness designation must be provided for by Congress and created in cooperation with the County and the State. 3. Wilderness designation is not always an appropriate, effective, efficient, economic, or wise use of land. These lands can be adequately protected through mitigation, minimizing negative impacts and proper reclamation. 4. Wilderness management must provide for continued and reasonable access for holders of property rights within the area and provide for full use and enjoyment of these rights. 5. WSAs released by Congress must be managed based on the principles of multiple use and sustained yield. *B. Other Designations* 1. Special designations, such as Areas of Critical Environmental Concern (ACEC), critical habitat, semi-primitive and non- motorized travel, etc., result in single-purpose or non-use and may be detrimental to the area economy, lifestyles, cultures, and heritage. 2. No special designations or management plan should be proposed until it is determined and substantiated by reproducible scientific data, that there is a need for the designation, that protections cannot be provided by well-planned and managed development, and the area in question is unique when compared to other area lands. 3. Designations must be made in accordance with the spirit and direction of the acts and regulations that created them. *C. Introduced, Threatened, Endangered and Sensitive Species, Recovery Plans, Experimental Populations and Related Guidelines and Protocols* 1. These designations or reintroductions could grow beyond boundaries and scope and may result in detrimental effects on the area economy, lifestyles, cultures, and heritage. 2. No such designations or reintroductions should be made until it is determined and substantiated by reproducible scientific data that there is a need for such action, that protections cannot be provided by other methods and the area in question is unique when compared to other area lands. 3. Designation or reintroduction plans, guidelines, and protocols must not be developed or implemented without the full involvement of the County and full public disclosure.

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
2	General/Coordination (continued)	4. Any analysis of such proposed designations or reintroductions must be inclusive and analyze all needed actions associated with the proposal to prevent growth beyond the scope and boundaries that were analyzed in the proposal. 5. Recovery plans must provide for indicators to track the effectiveness of the plan and identify at what point recovery is accomplished. *D. Public Access, RS 2477 Roads* 1. Access across and to public lands is critical to the use, management, and development of those lands and adjoining private lands. 2. No roads, trails, rights-of-way, easements or other traditional access for the transportation of people, products, recreation, energy or livestock may be closed, abandoned, withdrawn, or have a change of use without full public disclosure and analysis. 3. Roads covered by RS 2477 should remain open and the County will take any action needed to protect these rights. This includes identification, inventory, and participation in any legal process to protect them. 4. Access to all water-related facilities such as delivery systems, monitoring facilities, livestock water and handling facilities, etc., must be maintained. Access routes must be adequately maintained by the owner of that route. Unreasonable restrictions may result in the loss of use of such facilities and property rights. *E. Land Exchanges, Acquisitions and Sales* 1. The State and Federal Governments hold a sufficient amount of land to protect public interest, so there shall be no net loss of private land base. 2. Any affected district within the County must be compensated for any net loss of private lands with public lands of equal value or compensated for any loss of assessed valuation resulting from these exchanges by the appropriate acquiring agency. 3. A private property owner has a right to dispose of or exchange his property as he/she sees fit within applicable law. *F. Recreation and Tourism* 1. The County has outstanding potential for recreation and tourism. 2. Resource development, recreation, and tourism are compatible through proper planning and management. 3. Potential developments should include family-oriented activities and developments that are accessible to the general public and not limited to special interest groups.

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
2	General/Coordination (continued)	4. It supports cultivating recreational facility development and maintenance partnerships with other entities, agencies, and general special interest groups. *G. Wildlife* 1. Properly managed wildlife populations are important to the recreation and tourism economy and to the preservation of the culture and lifestyles of its residents. 2. With proper management and planning, healthy wildlife populations are compatible with other resource development. 3. No increases in wildlife numbers or the introduction of additional species may be made until the availability of forage or habitat has been determined and the impacts on other wildlife species have been assessed. *H. Forage Allocation/Livestock Grazing* 1. The proper management and allocation of forage on public lands is critical to the viability of the county's agriculture, recreation, and tourism industry. 2. The viability of a large number of agriculture and livestock operations is dependent on access to grazing on public lands. 3. Forage allocated to livestock should not be reduced for allocation to other uses. Current livestock allocation should be maintained. *I. Off Highway Vehicles (OHVs)* 1. OHVs have become an important segment of the recreation industry and is an important tool and mode of transportation for farmers, ranchers, and resource development. 2. Public Land Management agencies must implement and maintain an aggressive OHV program to educate users on how to reduce resource impacts. This is to be followed by an aggressive enforcement program. 3. The non-recreational use of OHVs, such as development and livestock operations, should be provided for in all areas unless restricted by law. Please also address the appropriate sections in the City of Sierra Vista planning documents.
3	General Management Approaches/13 and 14t	Throughout this document, sections have Desired Conditions and Objectives, but many of the sections fail to discuss Management Approaches. As noted on page 14, management approaches "may illustrate suggestions as to how desired conditions or objectives could be met, convey a sense of priority among objectives, or indicate a possible future course of change to a program . . . ." In order to those potentially impacted by these conditions and objectives to understand how and when (based on priority) these desired conditions or objectives will be met, it is important for each section to include management approaches. We suggest that this information be included throughout this document.
4	2/Climate Change/ 19 and 20	Under Management Approaches, we have concerns regarding whether or not preventing fires in non-adapted desert communities is the best approach. We suggest that the background information provided before the Desired Conditions section provide rationale and justification for this approach. Also under Management Approaches, we are concerned about potential follow-up actions that may occur as a result of "identifying the water rights status of water resources". Is there a potential in this process for pursuing litigation to impact current water rights/use? We suggest that this action be clarified by what CNF plans to do with this information once it is collected.

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
5	2/Vegetation Communities/21 and 22	Under Desired Conditions, we have concerns regarding whether or not well-distributed snags and coarse woody debris would potentially increase fuel load resulting in more high-intensity fires? Under Standards, we suggest that somewhere in the background information you include rationale and justification for using five years following final harvest as the appropriate time for being adequately restocked for regeneration.
6	2/Natural Water Sources/56	Is there a specific reason why the Huachuca water umbel was not included in the list of species under General Description? If so, please state the rationale. If not, please include.
7	2/Natural Water Sources/57	Under Objectives, it is unclear who currently has instream flow water rights for the areas where USFS would apply for the rights. What entities already own or use these water rights? How would they be compensated for the loss of the water rights?
8	2/Natural Water Sources/58	Under Management Approaches, see comment #5 above. Also, please consider including removal of invasive plant species that compete with native plant species. Although it may be mentioned elsewhere, the management of natural water sources should include management for recovery of T&E species. Please consider addition of management approaches for this effort.
9	2/Constructed Waters/59	Huachuca water umbel has been found in association with constructed waters as well as natural waters. Please add this species to the list. In addition to aquatic species, there are a number of native water-dependent plant species (such as Huachuca water umbel) that should be included in management species. Please clarify the need to manage for these species as well.
10.	2/Soil/60	Invasive mesquite can cause hydrophobic soils that cause increased runoff. We suggest that you add removal of invasive mesquite and restoration of native grasslands as a potential management approach to increase infiltration of precipitation and reduce runoff and erosion.
11.	2/Air/62	Under Management Approaches, we suggest that consideration be given to including management of fugitive dust through application of water at areas where USFS actions may result in increases of particulates becoming airborne.
12.	2/Animals and Rare Plants/63	Under General Description, we suggest clarifying text to include plant species that occur closely adjacent to aquatic environments (such as the Huachuca water umbel).
13	2/Invasive Species/66 and 67	Please include Johnson and Bermuda grasses which can outcompete Huachuca water umbel and invasive mesquite that have outcompeted native grasses in areas that were native grasslands prior to the mesquite invasions.
14	2/Scenery/81	Under Management Approaches, we suggest including restoration and reseeding requirements for all projects.
15	2/Special Uses/83	Under Management Approaches, we suggest requiring all high- and low-power communication uses to coordination with the Encroachment Board at Fort Huachuca as required by Arizona SB 1387 that established the 2600 square mile Buffalo Soldier Electronic Test Range. This legislation ensures that there is no significant interference with testing and training activities that would impact missions or National Security at Fort Huachuca.

No.	Chapter/Section /Page Number	Comments – Land and Resource Management Plan
16	2/Tribal Relations/87	Why is only one area and one tribe called out specifically in the Management Approaches? Numerous other tribes have concerns in other areas, especially the Huachuca and Chiricahua Mountains.
17	2/Range Management/89	Under Management Approaches, we suggest that permit applications for grazing must require that the land be grazed rather than left fallow as some non-ranching organizations have attempted to do. This avoids socioeconomic impacts and environmental justice impacts under the National Environmental Policy Act for historic ranching operations.
18	2/Land Ownership Adjustments and Boundary Management/90 and 91	Throughout this section, we suggest inclusion of how USFS plans to manage to maintain the tax base for the Arizona Counties that would be impacted by withdrawal of land that is currently part of the tax base for the Counties.
19	3/Wild Backcountry/97	Under Management Approaches, we suggest inclusion of efforts to remove trash left by illegal aliens who traverse USFS land.
20	3/Figure 4/101	Please add County boundaries to this figure.
21	3/Fire in Wilderness/103	Under Management Approaches, we suggest inclusion of restoration following wildland fires.
22	3/Wildlife in Wilderness/104	Under Standards, we suggest inclusion in #2 of "and when conditions exist that support re-introduction". For example, when there is an ongoing upgradient source that continues to provide predatory invasive species, there are not appropriate conditions to reintroduce the native species.
23	4/Huachuca EMA/147	Please add Canelos Ladies Tresses to the list as this species is exclusively located in this area.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
A	General	See comments above regarding the need for coordination, cooperation, and collaboration. All previous comments to the LMP Revision and all previous EIS comments are herein incorporated by reference into these EIS comments.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
B	General Comment on Travel Management Process	It is our understanding that the LMR Revisions and accompanying EIS provide overall travel management direction and the CNF is completing independent NEPA analysis for actual site specific road closures and other changes in the Forest travel management system. This two tiered approach is a proverbial "Catch 22" for local government including Cochise County and the City of Sierra Vista. The CNF stated in the February 13, 2014 meeting with Cochise County and the City of Sierra Vista, that no travel management decisions are made at the LMP/EIS level. They stated that the County already had input to the Forest Travel Management Plans via the Collaborative Alternative Team and that each CNF District was in the process of finalizing NEPA documents for individual road closures at this time. Cochise County and the City of Sierra Vista would be effectively disenfranchised from effectively coordinating, collaborating or cooperating on travel management decisions on CNF if this is correct. First, the CNF did not fulfill their legal duty to coordinate with the County or City on the LMP/EIS. Second, the Collaborative Alternative Team approach used by CNF for travel management was designed as a consensus process. However, on the majority of roads in Cochise County and possibly some roads within the City of Sierra Vista, the Collaborative Alternative Team failed to reach consensus. Therefore, the CNF defaulted to the position that the District Rangers will make the travel management decisions. To date the County and City have NOT had effective input on the CNF travel management plans. To date the CNF has not cooperated or coordinated with the County and City. The CNF needs to take a step back and involve local government including Cochise County and the City of Sierra Vista in all land management planning and all travel management decisions within the County and City's jurisdiction. The County and City are responsible by law for the health, safety, and general welfare of its citizens. The County and City maintain roads that cross National Forest Management System lands. The County Board of Supervisors, County Manager, County Engineer, County Planner and other key County personnel as well as City Council, City Manager, Mayor, City Department of Public Works, etc. must be notified of all CNF travel management changes proposed within their respective jurisdictions and provided the opportunity for coordination, collaboration and cooperating agency status on NEPA document.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
B	General Comment on Travel Management Process (continued)	The following items from the Cochise County Land Use Plan must be included in any travel management process: *D. Public Access, RS 2477 Roads* 1. Access across and to public lands is critical to the use, management, and development of those lands and adjoining private lands. 2. No roads, trails, rights-of-way, easements or other traditional access for the transportation of people, products, recreation, energy or livestock may be closed, abandoned, withdrawn, or have a change of use without full public disclosure and analysis. 3. Roads covered by RS 2477 should remain open and the County will take any action needed to protect these rights. This includes identification, inventory, and participation in any legal process to protect them. 4. Access to all water-related facilities such as delivery systems, monitoring facilities, livestock water and handling facilities, etc., must be maintained. Access routes must be adequately maintained by the owner of that route. Unreasonable restrictions may result in the loss of use of such facilities and property rights. The CNF must also incorporate the appropriate City of Sierra Vista land use plan content into their LMP Revisions, EIS, and Travel Management planning processes.
C	General	A discussion of potential impacts to the electromagnetic (EM) spectrum within the Buffalo Soldier Electronic Test Range (BSETR). The BSETR is a significant natural resource, which has been designated and protected by Arizona Senate Bill 1387. The unique topography and geology of the mountain ranges surrounding the BSETR create an extremely quiet EM spectrum. The EM spectrum within the BSETR is a natural resource that can be severely damaged by an increase in electromagnetic interference just as other natural resources, such as species habitat, can be impacted by projects. Fort Huachuca has included the EM spectrum as a natural resource in its NEPA documentation over the past several years. Their recent EA for Construction of a Photovoltaic System on United State Army Garrison Fort Huachuca, Arizona, demonstrates how this natural resource is evaluated. Construction of communications infrastructure and powerlines that are permitted under the LRMP needs to be evaluated in this EIS.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
D	General – Existing rights	The EIS needs to analyze impacts to existing rights under each alternative including the No Action alternative. Existing rights include water rights, exploration and mining rights, special use permit and livestock grazing permit stipulations, RS2477 roads, etc. The EIS fails to address impacts to existing private water rights due to the proposed wilderness under each alternative. The County and City were told that these rights would not be impacted by the proposed LMP Revision. When the CNF was asked about Tombstone water rights in wilderness, the County and City representative were told that Tombstone's water rights are not impacted by wilderness, including the Town's ability to utilize mechanized equipment to repair their water sources within wilderness. The issue at hand is disclosure. Private landowners within the proposed wilderness areas within Cochise County need to know the true impacts. What will happen in the future, be in 10, 20 or even 100 years, when they need to maintain their water rights? The issue of whether they will continue to be able to use motorized/mechanized equipment to the same level they use it now is critical to the NEPA analysis. Until that is done, the EIS is legally deficient. The same analysis must be done for all existing rights.
E	2/Land Use Zones Including Wild 2/Land Use Zones/19-20	The below information is quoted from the EIS (highlighted and bolded emphasis added). **CNF proposes to manage 91 percent of the Forest for "quiet recreation" and No OHVs**. Motorized vehicles will be allowed on less than 1 percent of the Forest if the LMP Revision is approved as written. The proposed land use zones are inconsistent with Cochise County and the City of Sierra Vista land use plans. These inconsistencies must be analyzed. We request that CNF meet with local government agencies including the City and County, allow cooperating agency status, attend coordination meetings, and address local plans. **Land Use Zones Wild Backcountry** The proposed action would designate a Wild Backcountry Land Use Zone of 626,167 acres (**35 percent of the national forest**) to accommodate various **nonmotorized uses** while concurrently providing for limited motorized access to the area on National Forest System roads designated as maintenance level (ML) 2.11 The zone comprises inventoried roadless areas, areas adjacent to designated wilderness areas, and other relatively pristine areas. Desired conditions are described, and guidelines are established to maintain desired conditions and visitor experiences. Suitable uses specified for the Wild Backcountry Land Use Zone are livestock grazing, harvesting of timber for restoration purposes, mountain biking, and collection of forest products and fuelwood. **Off-highway vehicle (OHV) recreation, developed recreational facilities, and timber production are not suitable uses.**

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
E	2/Land Use Zones Including Wild 2/Land Use Zones/19-20 (continued)	**Comment**: Please explain how this designation and the ones listed below will influence the individual NEPA documents for travel management. Will the District level NEPA documents tier to the Revised LMP by defaulting to the position that OHV use is not suitable within wild backcountry, roaded backcountry, and special areas? This needs to be clarified to readers to assure that local government agencies and the public understand the full force and effect of the Revised LMP and how it plays into the District level travel management NEPA analyses. **Roaded Backcountry** A proposed 647,013-acre (**37 percent of the national forest**) Roaded Backcountry Land Use Zone would accommodate a range of dispersed uses and motorized access, with **an emphasis on quiet recreation**. This area would be managed to retain its natural character and to limit the degree and type of development. Desired conditions are described, and guidelines are established to maintain conditions and visitor experiences. Suitable uses specified for the Roaded Backcountry Land Use Zone include livestock grazing, motorized access, motorized dispersed camping, mountain biking, recreation facilities, harvesting of timber in conjunction with restoration projects, and collection of forest products and fuelwood. This zone is **not suitable for OHV trails** and timber production. **Comment**: Please explain how the emphasis on quiet recreation and the statement that the zone is not suitable for OHV trails effects existing roads and trails within the upcoming District level travel management decisions. Will District Managers tier to the Revised LMP and prohibit noisy recreation including OHVs within Roaded Backcountry? Many dirt roads are currently considered "OHV trails" by OHV users. Will existing dirt roads be closed during the District travel management process in an effort to make the District level travel management decisions compliment the Revised LMP? **Motorized Recreation** Approximately 3,251 acres of the Coronado (**less than 1 percent**) **are designated for management as a Motorized Recreation Land Use Zone**. This zone includes areas that currently experience heavy use by motorized recreational vehicles. Management direction is focused on providing a wide variety of recreational experiences, including OHV use and vehicular sightseeing, while mitigating effects of motorized use and minimizing conflicts with other users. Desired conditions are described, and guidelines are established to maintain conditions and visitor experiences. Most forest uses, except for timber production, are suitable in this management area.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
E	2/Land Use Zones Including Wild 2/Land Use Zones/19-20 (continued)	**Special Areas** **Existing Wilderness Areas** Eight designated wilderness areas, which add up to 338,294 acres (**19 percent of the national forest**), are included in the draft revised plan. Generic desired conditions (goals), objectives, standards, and guidelines are defined for the following resource and social elements of designated wilderness areas: wilderness character, scenic quality, vegetation, wildlife, soil and water, recreation and education, trails and signage, fire, insects and disease, and research. In addition, the draft revised forest plan defines wilderness area specific desired conditions, objective, guidelines, standards, and suggested management approaches. In the draft revised plan, wilderness areas are suitable for livestock grazing, nonmechanical harvesting of traditional forest products, and outfitter and guide services compatible with wilderness character. **Selected activities not suitable in wilderness areas include motorized and mechanized use**, recreation facilities, timber harvest, fuelwood harvest, and commercial uses that are not wilderness dependent (see chapter 4 of draft revised forest plan).
F	1/Decision Framework/10	"A copy of the most recent draft revised forest plan and a wilderness evaluation report are provided as companion documents to this EIS." **Comment**: A consistency analysis needs to be performed to address the following requirement within the Cochise County Land Use Plan: *A. Wilderness Designation* 1. Any consideration of any new wilderness designations of federal lands in Cochise County will be a result of a collaborative process, including federal, state, and county officials. 2. The only legal designations of Wilderness Study Areas (WSA) are those designated under section 603 of the Federal Land Policy and Management Act (FLPMA) and the opportunity to create additional wilderness ended in 1991, except as authorized by Congress; any new wilderness designation must be provided for by Congress and created in cooperation with the County and the State. 3. Wilderness designation is not always an appropriate, effective, efficient, economic, or wise use of land. These lands can be adequately protected through mitigation, minimizing negative impacts and proper reclamation. 4. Wilderness management must provide for continued and reasonable access for holders of property rights within the area and provide for full use and enjoyment of these rights. 5. WSAs released by Congress must be managed based on the principles of multiple use and sustained yield.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
G	2/Table/50	"Greatest potential positive effects on water resources because of wilderness restrictions that decrease ground-disturbing activities." Comment: Please explain the effect of wilderness expansions and additions in relation to use of mechanized equipment to maintain pre-existing water rights. With the proposed expansion of the Chiricahua Wilderness and other wilderness additions, explain whether any permission from the Forest Service would be necessary prior to use of mechanized equipment within each proposed wilderness expansion/new wilderness area. What restrictions might be placed on use of mechanized equipment within the wilderness areas (threatened and endangered species, soils, noise restrictions, etc.). Explain the details of any permits necessary, any studies that would be required prior to maintenance activities, the time frames, costs, who bears the costs, etc. How does the "minimum requirements decision guide:" effect the right to use mechanized equipment in emergencies? If a water sources is damaged during a fire, storm, or other event, can the holder of the water right enter the wilderness immediately with mechanized equipment? If so, please clearly state this within the Revised LMP and the EIS. If not, please thoroughly explain what notice the water right holder needs to give the Forest, timelines, data necessary prior to the decision, who makes the decision, what restrictions can be places on use of mechanized equipment in wilderness (timing, noise level, size of equipment, types of equipment, number of vehicles/people, etc.).
H	2/Table/52	Restriction on motorized uses in new recommended wilderness area would reduce the potential for jaguar mortality from vehicle collisions in recommended wilderness. **Comment:** How many jaguars have been hit by vehicles on CNF? We believe the answer is "zero". We suggest the Forest choose a better parameter to evaluate alternatives than potential jaguar mortality from vehicle collisions. Zero is zero and that does not change from alternative to alternative. At this time in history there appears to be one lone jaguar in southern Arizona and it has been photographed only in remote areas, far from potential vehicle collisions.
I.	3/Social Impacts and Environmental Justice/419 and 420	The section on Environmental Justice fails to evaluate the potential inclusion of additional lands currently on the tax rolls within CNF. This would result in a decrease in tax collections for the Counties in Arizona. Although the plan acknowledges federal payments, this needs to be evaluated in the EIS. Fort Huachuca has an economic impact within Cochise County of approximately $2.4B annually. Impacts to the EM spectrum through additional communications infrastructure and powerlines have the potential to impact the EM spectrum which would impact the number of DOD jobs in the area as well as to national security. Both have socioeconomic and environmental justice impacts that need to be included in this EIS.

No.	Chapter/Section /Page Number	Comments – Environmental Impact Statement
J	References	2008c. Coronado National Forest Social and Economic Sustainability Report. On file at: Coronado National Forest Supervisor's Office, Tucson, AZ. Comment: This document is cited in the reference section of the EIS; however, the EIS fails to analyze economic sustainability. Though the EIS is replete with ecological sustainability information it is virtually devoid of any economic sustainability analysis. We suggest this be corrected prior to issuance of the FEIS.

Congressman Raul Grijalva

RAUL M. GRIJALVA
3rd District, Arizona

COMMITTEE ON NATURAL RESOURCES
PUBLIC LANDS AND ENVIRONMENTAL REGULATION—*Ranking Member*
INDIAN AND ALASKA NATIVE AFFAIRS
ENERGY AND MINERAL RESOURCES

Congress of the United States
House of Representatives
Washington, DC 20515-0307

WEBSITE: http://grijalva.house.gov/

1511 LONGWORTH HOB
WASHINGTON, DC 20515
PHONE (202) 225-2435 / FAX (202) 225-1541
738 N. 5TH AVE, SUITE 110
TUCSON, AZ 85705
PHONE (520) 622-6788 / FAX (520) 622 0198

February 28, 2014

Coronado Forest Plan Revision
P.O. Box 1919
Sacramento, CA 95812

Dear Forest Planners,

I am writing today regarding the Forest Plan Revision process for the Coronado National Forest. Significant portions of the Coronado National Forest—including the Tumacacori Highlands, Pajarito Mountains, Patagonia Mountains, and southern Santa Rita Mountains—are within my Congressional District. I know many of these places well, and my office regularly hears from constituents on the many issues and outstanding scenery found there.

Serving on the House Natural Resources Committee has given me particular insight into the challenges and responsibilities facing our land management agencies as well as the too-often-conflicting desires of private industry, various recreational user groups, and the needs of the land itself. I commend the Forest Service, and the staff of the Coronado National Forest in particular, for attempting to fulfill the mission in times of financial constraints and difficult politics.

For southern Arizona, I am a strong advocate of protected open space as an ecological necessity and as a quality-of-life amenity. With Pima County, I have worked to convert developable sensitive lands to secure public lands and open space. I have also worked to provide legislative conservation protections to the Coronado National Forest; including but not limited to: the Tumacacori Highlands Wilderness Act, the Santa Cruz Valley Heritage Act and the Southern Arizona Public Lands Protection Act.

Southern Arizona is a great place to live and work-and we see more and more people choosing to do so every year. Balancing recreational opportunities for this increasing population with preservation and ecological conservation that this population also values is one of the many challenges facing the Coronado National Forest. This challenge must be met in a way that does not jeopardize the biodiversity and outstanding natural character of much of the Coronado.

I will continue to do my part in assisting with that endeavor by pursuing legislative measures helpful to achieving these conservation goals. Wilderness designation by Congress, for example, has been an extremely effective tool for preservation and conservation since it became available 50 years ago this year. My experience with the Tumacacori Highlands bill reinforced for me the public's strong and broad desire to see additional Wilderness designated in southern Arizona. I urge the Coronado to take appropriate measures in the final plan to assure all potential wilderness areas retain their wilderness character and remain available for future Congressional consideration as designated Wilderness.

Thank you for your consideration of this letter. I look forward to your response and to continuing this important conversation.

Sincerely,

/s/ *Raul M. Grijalva*

Raul M. Grijalva
Member of Congress

Department of the Interior

United States Department of the Interior
Office of the Secretary
Office of Environmental Policy and Compliance
Pacific Southwest Region
333 Bush Street, Suite 515
San Francisco, CA 94104

IN REPLY REFER:
(ER 13/0740)

Filed Electronically

20 February 2014

Coronado Forest Plan Revision
P.O. Box 1919
Sacramento, CA 95812

Subject: Draft Environmental Impact Statement (DEIS) US Forest Service (USFS), Programmatic – Revision of the Coronado National Forest Land and Resource Management Plan, Cochise, Graham, Pima, Pinal, and Santa Cruz Counties, Arizona; Hidalgo County, New Mexico

To whom it may concern:

The Department of the Interior has reviewed the U.S. Forest Service's (USFS) Draft Programmatic Environmental Impact Statement (DPEIS) for revision of the Coronado National Forest Land and Resource Management Plan (LRMP) in Cochise, Graham, Pima, Pinal, and Santa Cruz counties, Arizona; and Hidalgo County, New Mexico. We provide general comments below.

There are two National Natural Landmark (NNL) sites within the Coronado National Forest, but no discussion about these designated areas is included in the draft LRMP. The "Research Natural Areas, Botanical, Zoological, and Other Special Areas" section in Chapter 3 of the DPEIS would be an appropriate section for introduction and discussion about the NNL sites.

We recommend adding the following language: "National Natural Landmark (NNL) sites are designated by the Secretary of the Interior in recognition of the site's nationally significant natural features." There are two NNLs within the Coronado National Forest: Onyx Cave and Barfoot Park. In 1974, roughly 50 acres located within the Santa Rita Ecosystem Management Area (EMA) surrounding Onyx Cave were designated in recognition of the cave's numerous, beautifully-developed shield formations. It is considered one of the finest caves in Arizona.

Similarly, designated in 2011, Barfoot Park is located in the Chiricahua EMA, and provides one of the best Madrean-influenced ponderosa pine forests in the United States, and it includes high plant diversity.

Within the 680 designated acres is also one of the largest concentrations of well-developed talus slopes, supporting plants and animals not found elsewhere at this site." On page 32 of the DPEIS, reference is made to the Barfoot Park National Natural Landscape; however, this needs to be

changed to National Natural Landmark. Additionally, the designation year should be changed from 2010 to 2011.

In addition, interagency consultation under the Endangered Species Act will be required, and we recommend the USFS meet with U.S. Fish and Wildlife Service staff to discuss the consultation process and information needs. We look forward to continuing to work with USFS staff on the DPEIS and LRMP revision.

We appreciate the opportunity to review and comment on the DPEIS. For further information please contact Heather Eggleston, Regional National Natural Landmark Coordinator, Intermountain Region, Denver, Colorado, at 303-969-2945; or Steve Spangle, Field Supervisor, Arizona Ecological Services Field Office, Phoenix, Arizona, at 602-242-0212.

Sincerely,

/s/ *Patricia Sanderson Port*

Patricia Sanderson Port
Regional Environmental Officer

cc:
Director, OEPC
OEPC Staff Contact: Lisa Chetnik Treichel
Regional National Natural Landmark Coordinator, Denver, Colorado: Heather Eggleston
Field Supervisor, Arizona Ecological Services Field Office: Steve Spangle

Environmental Protection Agency

United States Environmental Protection Agency
Region 9
75 Hawthorne Street
San Francisco, CA 94105

February 20, 2014

Ms. Yolynda Begay
Coronado Forest Plan Revision
P.O. Box 1919
Sacramento, California 95812

Subject: Draft Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management Plan, Cochise, Graham, Pima, Pinal, and Santa Cruz Counties, Arizona; Hidalgo County, New Mexico (CEQ # 20130340)

Dear Ms. Begay:

The U.S. Environmental Protection Agency has reviewed the Draft Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management Plan (Coronado Plan) pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The EPA strongly supports the goals of the Coronado Plan. These goals-including ecosystem restoration and resiliency, and preservation of open space-which are described in the DEIS as the five overarching "needs for change" identified during scoping, seem particularly apt for a forest, such as the Coronado, facing present and future management challenges posed by surrounding development, ongoing and proposed mining activities, and the effects of climate change.

Based on our review of the subject DEIS, we have rated the Preferred Alternative and the document as (L0-1) Lack of Objections -Adequate (see the enclosed "Summary of EPA Rating Definitions"). The EPA recognizes the need for the use of mechanical thinning and prescribed fire and wildfire to achieve long-term restoration objectives. We commend the BLM for committing, in the Preferred Alternative, to strong best management practices and soil and water conservation measures to protect sensitive resources during mechanical harvest and fire treatments.

The EPA commends the Forest Service as well for devoting considerable attention to climate change in the proposed Coronado Plan-both in assessing potential effects (as evidenced by the proposed Finger Rock Canyon Research Natural Area, which would be dedicated to future ecological and climate change monitoring and research), as well as developing novel management strategies to mitigate and respond to these effects (strategies articulated in the detailed and thorough appended planning document "Climate Change Trends and Coronado National Forest Land Management Planning"). We recommend that the Final EIS and Record of Decision include a commitment to mitigate climate change effects, and to adapt management strategies accordingly, for the duration of the Coronado Plan.

We recognize the challenge the Forest Service faces by implementing a land and resource management plan that will rely heavily on prescribed bums and wildfire to achieve project objectives. We commend the Forest Service for acknowledging the potential air quality impacts associated with these treatments by proposing a revised Coronado Plan that identifies "goals and approaches for managing air quality related values in class I areas" (p. 207). Though the Coronado has good air quality, the fine particulate matter generated during wildland fire does present a human health risk. We recommend that the Forest Service implement BMPs and work with Arizona Department of Environmental Quality air quality officials to reduce emissions from prescribed bums and wildfires to the greatest possible extent. We also recommend that the BLM analyze and include a description, in the FEIS, of the potential for further reductions in air emissions, in proposed forest treatments, by lessening or eliminating pile burning of residual fuels in favor of biomass energy production.

We recommend that the Forest Service consider adding wilderness acreage to the Preferred Alternative comparable to the amount included in Alternative 1. The DEIS states that Alternative 1 responds to the five aforementioned "needs for change" in the same manner as reported for the proposed action, but that it "better addresses the need for management direction regarding ecosystem restoration and resiliency by proposing 255,448 acres more than the other alternatives for wilderness management" (p. 36).

Considering the management challenges confronting Coronado planners (both currently, and over the life of the revised Plan)-including encroaching development, mining activities, and the effects of climate change, among other pressures-it would seem most prudent to implement a Preferred Alternative with the maximum possible wilderness acreage, thereby ensuring the greatest forest resiliency and maximizing the achievement of restoration objectives.

We also recommend that the Forest Service include additional information, in the FEIS, on how the proposed Rosemont Copper Mine and other mining activities may affect long term Coronado planning objectives. We acknowledge that, as is stated in the DEIS, "this EIS neither evaluates nor provides information in support of a decision to approve any mining-related activity on the Coronado" (p. 434). Nevertheless, the Coronado has abundant locatable mineral resources, with "several large active mines, rock quarry operations, and exploratory mining activities on other Federal, State, and private land in the cumulative effects area" (p. 444). The FEIS should provide additional detail about how these mining activities may affect the major management goals identified in the Coronado Plan-including preservation of open space, protection of sensitive species and riparian habitat, and ecosystem restoration and resiliency-as well as regional air quality and visibility, particularly class I areas in and near the Coronado, including the Chiricahua Wilderness and Saguaro National Park.

We appreciate the opportunity to review this DEIS, and are available to discuss our comments. When the FEIS is released, please send one CD copy to this office (specify Mail Code ENF-4-2). If you have any questions, please contact me at 415-972-3521, or contact Jason Gerdes, the lead reviewer for this project. Mr. Gerdes can be reached at 415-947-4221 or gerdes.jason@epa.gov.

Sincerely,

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions

SUMMARY OF EPA RATING DEFINITIONS *

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that

the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment

Hidalgo County, New Mexico

State of New Mexico
Hidalgo County

Commissioners
Darr Shannon
Ed Kerr
Richard Chaires

County Manager
Jose J. SALAZAR

February 20, 2014

Coronado National Forest
ATTN: Plan Revision
300 W. Congress Street
Tucson, AZ 85701

Sent via e-mail to:
CoronadoNF@fscomments.org
Hard copy to follow

Dear Sirs;

Thank you for the opportunity to comment on the Coronado National Forest Draft Land and Resource Management Plan and the Draft Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management. Because of the length, breadth and complexities of these two documents, we will comment on each document separately.

Comments on the Coronado National Forest Draft Land and Resource Management Plan

It is obvious your agency has done an extensive review of Congressional Acts; federal rules, regulations, and guidance criteria; endangered species, plant and animal species; internal reports and literature in order to develop the Draft Management Land and Resource Management Plan. We commend your agency for this effort.

We'd like to thank Jennifer Ruyle, Jamie Kingsburg and Kevin Warner, Coronado National Forest, for attending the Hidalgo County Public Land Advisory (PLAC) meeting on Wednesday, February 5, 2014 to discuss these documents.

Concerns with the anticipated cumulative socio-economic impacts created by federal land and wildlife management planning compelled the creation of the PLAC in 1994. Through the years we have found these plans and resulting decisions do have a socio-economic impact in our County. For these reasons the PLAC has been actively participating in the Coronado Forest planning processes for many years as recognized in the Draft EIS.

Many families in our County have generational ties to the land and wildlife predating the establishment of Coronado National Forest by Congressional edict. As a result, the citizens of our County have a deep, abiding interest in the Forest Service's planning process.

Historically, the Peloncillo Ecosystem Management Area (Unit 14, 1986 Plan), has been managed for livestock grazing and dispersed recreation. We would like to see the Coronado National Forest Service continue to make this a management priority.

We commend the Forest Service for their recognition of the Native American contributions to the history, culture, and natural resources of the Coronado National Forest. In addition to the First Nation contributions we feel it should be noted our forested lands have also provided economic opportunities traditionally utilized by ranching and farming families, hunters, trappers, and miners. They have also afforded recreational activities that included a place for family and communities could enjoy the great outdoors.

Based on this heritage, we agree with the comments received during the scoping process, as stated by Jennifer Ruyle at the PLAC meeting; a reoccurring theme that kept emerging in the meetings was that "the participants wanted their forests managed in much the same way they had always been managed".

After additional review of the documents, we have the following comments to submit for the record:

Organizational Structure of the Draft Management Plan

Although it is commendable the Service has developed statements for Desired Conditions with Standards and Guidelines statements, we propose they are organized in a very confusing manner. To the laymen they appear redundant and repetitive.

We recommend, since the Draft Management Plan is only meant to serve as an over-arching, umbrella plan, these statements would be better suited discussed in each Ranger District's Management Plan. The Programmatic EIS indicates this will be done in the near future, under a separate planning process.

Broader, all inclusive, Desired Condition statements would seem better suited in this over-arching Regional Plan.

Congressional Directives

We also note a clear, concise mission statement does not appear in the Draft Management Plan. Although the Reference Section lists the many laws and directives the Service has complied when writing this Draft Plan, there appears to be no statement that reflects congressional intent, as defined under the National Forest Management Act (NFMA) and the Multiple-Use Sustained-Yield Act (MUSY).

NFMA clearly calls for a multiple-use sustained-yield mission by highlighting six products and services that must be coordinated by the Forest Service: outdoor recreation; range; timber; watershed; wildlife/fish and wilderness.

Although the Draft Plan claims the Coronado National Forest contributes a wide array of goods and service to its visitors and communities, it does not state what these are or whether they are being achieved. The only exceptions appear to be Wildlife/Fish, which is marginally discussed under Ecosystem Restoration and Recreation, discussed under Visitor Experience, also marginally discussed.

We are aware a committee of scientists in 1999 recommended "ecological sustainability" for the national forests. These recommendations were never endorsed by Congress and failed to include the goods and services the Forest Service had been mandated, by law, to provide its visitors and surrounding communities.

These recommendations, however, have forever altered and changed the Forest Service's Congressional directive for sustainable multiple use as mandated in NFMA, MUSY and the 1982 Planning Rule.

This is evidenced by the values currently reflected in the Draft Plan as demonstrated with the five priority needs; ecosystem restoration, safety and information, public access and travel patterns, preservation of open space and collaboration and partnerships.

Many of these "priority needs" are heavily value laden by special interest Non-Governmental Organizations (NGOs) that lobby for land use and wildlife planning policy changes at a national level. These organizations and some of their "scientific reports" include: the Conservation International (The Biodiversity Hot Spots: Madrean Pine–Oak Woodlands, 2001 - http://www.conservation.org/where/priority_areas/hotspots/north_central_america/Madrean-Pine-Oak-Woodlands/Pages/default.aspx); the World Wildlife Fund and Sky Island Alliance (Natural Heritage of the Peloncillo Mountain Region: A Synthesis of Science, 2003 - http://www.skyislandalliance.org/media/Peloncillo percent20Report.pdf) and; the Sky Island Alliance, State of the Coronado National Forest: An Assessment and Recommendations for the 21st Century, 2008 - http://skyislandaction.org/SIAC-Library/state_of_the_coronado/Overview.pdf .

Other agencies also contributed to these value laden land management directives including the Rocky Mountain Research Station (Connecting Mountain Islands and Desert Seas: Biodiversity and Management of the Madrean Archipelago II, 2004 http://www.fs.fed.us/rm/pubs/rmrs_p036.html).

Unfortunately these organizations do not always reflect the values embraced by most local citizens, especially in small, rural counties, who must live and work under their recommended policy changes. These recommendations are often adopted through internal directives from the national headquarters of federal land and wildlife management agencies, without input from states and counties.

With this thought in mind we will examine the five topic areas (pages 6-7).

Topic 1 – Ecosystem Restoration and Resiliency

The scientific community recognizes an ecosystem can be as small as a backyard or as large as the earth. Unfortunately, this word, ecosystem, has become value-laden by the NGOs that promote the concept of managing a specific area for "biodiversity", including endangered and special status plants and wildlife to the exclusion of other species. Ecosystem management does not comply with congressional law and should not be a topic of discussion in the draft Plan.

The concept of biodiversity is not based on empirical facts or theoretical predictions. We submit, by using the term, biodiversity, the Draft Plan subordinates the multiple use and sustained yield mandate to speculative philosophical ideals that are value laden but cannot be scientifically tested, measured, repeated or evaluated.

We are concerned the Coronado National Forest Service, because it does not provide a clear mission statement that includes multiple-use/sustained yield values, will continue to place more emphasis on Ecosystems and Biodiversity values as its standard in land-use planning process. We recommend these terms, ecosystems and biodiversity, be dropped from the Plan.

Topic 2 - Visitor Experience: Recreational opportunities and positive visitor experiences are an important value and source of economic development within Hidalgo County.

Since the Peloncillo Management Area is remotely located it does not have the public pressures other management areas closer to urban areas experience. In fact because of its distance from Tucson, it has been largely ignored by the Coronado National Forest Service. We propose a few camp grounds, hiking and OHV trails should be developed so its economic potential to our communities can be maximized.

Topic 3 - Access to National Forest System Lands: Hidalgo County has actively pursued access to, into, and through the Peloncillos for many years. We agree that a place-based plan addressing local concerns and access needs should be developed in cooperation with the County.

As a known drug entry point into the United States from Mexico we propose the Coronado National Forest Service and the Douglas Ranger District make every effort to work in cooperation with the County and Hidalgo Sheriff's Department to ensure all forest roads remain open. This should be made a priority management goal to both protect the natural resources in the Peloncillos and the citizens that visit the area.

Topic 4 - Preservation of Open Space: As a small rural county, with a population density of approximately 1.7 persons per mile, preservation of open space is not a major concern at a County level.

Unfortunately Non Government Organizations (NGOs), as discussed above, have made preserving open space a major topic to citizens that live and work in heavily industrialized urban areas. These NGOs have continued to promote this topic until it has become very heavy-laden with values that are not shared by most rural communities. We recommend this topic be dropped from the Draft Plan and further discussed in the Travel Management and District Management plans that are scheduled for development.

Topic 5 - Communities, Collaboration and Partnerships: As previously stated, Hidalgo County appreciates the Coronado National Forest Service making an effort to involve local governments in land use and wildlife planning.

We whole-heartedly agree the Coronado National Forest should be a cooperator with local government in the land-use planning process as stated in your Draft Plan.

As a local government, we encourage the Service to seek input at the earliest time. It is unfortunate federal agencies do not allow local government participation at the ID Team level. Early involvement at this level could provide local expertise of the area, including but not limited to: local knowledge of wildlife abundance, habitat needs and community values; anticipated cumulative impacts; resolve potential conflicts; and provide a foundation for a smoother land-use planning process. Once a land use or wildlife planning document is published, we have found it very difficult to get certain precepts, unsubstantiated science, or recommendations reversed.

We propose a statement on page 4 of the Plan should be added that defines a county's statutory obligations to promote and protect its citizens' health, safety, and welfare in order to clarify its obligations and contributions to the coordination process. Please add Hidalgo County to the lists of Cooperating Agencies and collaborators (pages 135 & 229).

Not a topic but an issue of concern, we appreciate the statement on page 5 regarding the climate changes the Coronado National Forest has experienced throughout history. Based on this

historical discussion, it appears many of these climatic changes occurred before industrial civilization was present. As you are aware, global warming, also known as climate change, has been scientifically challenged and is thought to be a naturally occurring phenomenon. Global Warming is just another example of a value laden issue that has not be scientifically proven.

Draft Environmental Impact Statement (DEIS)

Since the Draft Land and Resource Management Plan is such an exhaustive document to read, comprehend and lacks clarity on the Forest Service's values, submitting comments on the Draft Environmental Impact Statement is even more difficult.

In our opinion, management decisions based on value laden topics will never lead to cooperation and consistency with rural communities and county land-use plans. We suggest, until the Draft Land Resource Management Plan is rewritten, it will remain virtually impossible for Hidalgo County to choose an alternative that can be supported by its citizens.

We agree with the reoccurring theme that kept emerging during the scoping process that our forests should be managed in much the same way they have always been managed - under FSMA and MUSY guidance. If that means supporting alternative 1, the no action alternative, we choose this alternative.

Sincerely,

/s/ *Darr Shannon*

Darr Shannon,
Hidalgo County Commission

Cc: Jennifer Ruyle jruyle@fs.fed.us
Stephen Pearce, U.S. House of Representatives
Senator Tom Udall, U.S. Senator
Senator Mark Heinrich

Hopi Tribe

The Hopi Tribe

Herman G. Honanie
Chairman

Alfred Lomahquahu Jr.
Vice-Chairman

January 27, 2014

Jim Upchurch, Forest Supervisor
Coronado National Forest
300 West Congress
Tucson, Arizona 85701

Coronado National Forest, Plan Revision

Dear Supervisor Upchurch,

Thank you for your correspondence dated November 15, 2013, with an enclosed Coronado National Forest proposed Draft Land Management Plan and a Programmatic Draft Environmental Impact Statement. The Hopi Tribe claims cultural affiliation to the Paleo-Indian, Archaic, and Hohokam earlier identifiable cultural groups on the Coronado National Forest. The Hopi Cultural Preservation Office supports the identification an. d avoidance of our ancestral sites and we consider the prehistoric archaeological sites of our ancestors to be "footprints" and Traditional Cultural Properties. Therefore, we appreciate Coronado National Forest's continuing solicitation of our input and your efforts to address our concerns.

The Hopi Cultural Preservation Office understands the management plan will replace the current 1986 plan and provide guidance for managing 1,783,639 acres of Forest lands in Arizona and 70,729 acres New Mexico for the next 10 to 15 years. The Draft Plan and DEIS acknowledges that "Native Americans a wide variety of resources in the mountain now comprising the sky islands of the Coronado National Forest" and "tribes share an interest in how the Coronado is managed and in protecting important natural and cultural resources." We note the Desired Conditions of Tribal Relations involve history and uses.

We note that subsequent to Coronado and the Spanish suppression of Native American people in the Southwest, the United States has not honored the continuing validity of Native American pre-existing rights, and the Coronado National Forest "rich historic period record of mining, ranching and Forest Service administration" has further devastated our lands and people.

We consider "the overall goal of managing National Forest System lands to sustain the multiple uses of its resources in perpetuity" to be incompatible with the 21st Century, when increasing and conflicting uses further alienate Native people from our traditional lands and our uses of them. We recommend the Forest Service dedicate lands for protection in perpetuity, because multiple uses have been demonstrated to destroy our traditional cultural landscapes in perpetuity.

Therefore, we support Alternative 1 that proposes 255,448 more acres 16 parcels to be designated as wilderness, of 31 parcels that were evaluated. This alternative is the "greatest benefit to Native American and cultural resources interests because of 16 new recommended wilderness areas" and

"vegetation and forest product availability would benefit more than all alternatives because of wilderness use restrictions."

In comparison, the proposed action, preferred alternative recommends only 2 parcels to be designated as wilderness. We appreciate that the Ku Chish and Mount Graham wilderness recommendations, however, an unresolved public conflict involves allocation of additional acreage to wilderness. Why does then does proposed alternative include only 2 of 31 evaluated parcels?

In 2011, the Forest Service conducted nationwide conference calls and meetings or listening sessions "on the effectiveness of existing department and agency sacred sites laws, regulations, and procedures," which resulted in *Report to the Secretary of Agriculture: USDA and Forest Service Policy and Procedures Review Indian Sacred Sites.* We recommended Department of Agriculture and Forest Service develop and apply regulations pursuant to the Religious Freedom Restoration Act and the American Indian Religious Freedom Act, and incorporate the United Nations Declaration on the Rights of Indigenous Peoples into its policies and procedures and commit to abide terms. None of these recommendations are mentioned in this Draft Plan.

We expect the Forest will decide on the proposed action, preferred alternative. Therefore we hereby request that the Forest include the 16 parcels to be designated as wilderness in the Record of Decision and Final Draft Land Management Plan and Programmatic Environmental Impact Statement.

If you have any questions or need additional information, please contact Terry Margart at 928-734-3619 or tmorgart@hopi.nsn.us. Thank again you for your consideration.

Respectfully,

/s/ *Leigh J. Kuwanwisiwma*

Leigh J. Kuwanwisiwma, Director
Hopi Cultural Preservation Officer

xc: Regional Forester
P.O. Box 1919, Sacramento, CA 95812
Arizona State Historic Preservation Office

San Carlos Apache Tribe

San Carlos Apache Tribe
San Carlos Avenue
P.O. Box 0
San Carlos, Arizona 85550
Phone (928) 475-2361
Fax (928) 475-2560

Terry Rambler
Vice-Chairman

Dr. John Bush
Tribal Chairman

February 13, 2014

Jim Upchurch
Forest Supervisor
Coronado National Forest
U.S. Department of Agriculture
300 W. Congress
Tucson, Arizona 85701

Submitted electronically at:
CoronadoNF@fscomments.org
(Subject: Coronado National Forest, Plan Revision)

Re: San Carlos Apache Tribe Comments on Draft Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management Plan

Dear Forest Supervisor Upchurch:

Thank you for the opportunity to present the San Carlos Apache Tribe's ("Tribe") comments on the Draft Programmatic Environmental Impact Statement for Revision of the Coronado National Forest Land and Resource Management Plan ("Draft EIS"). The Tribe has not had the opportunity to complete a thorough review of each of the alternatives presented in the Draft EIS and reserves the right to present further comments under well-established authorities for government-to-government consultation between the Tribe and the Coronado National Forest ("Coronado N.F."). Nevertheless, the Tribe wishes to express several areas of general concern which we believe should be addressed in the review process.

Apache Homelands

The Apache People's traditional homeland encompassed a great portion of Arizona, New Mexico and Mexico. The Apache homeland extended from the Grand Canyon in north-central Arizona, including the San Francisco Peaks, to south of the international border with Mexico well into the Sierra Madre range and from the western portion of Arizona, near Wickenburg and all the way east, past the state boundary line of Arizona and New Mexico. Most, if not all, of the Coronado N.F. covers Apache aboriginal lands. Thus, the Tribe has an overriding interest in Coronado N.F.'s proposals for the development of a revised land and resource management plan.

Apache Culture, Traditions and Values

The Tribe's comments expressed herein are viewed through Apache culture, traditions and values. Traditional Apache culture and a deep abiding respect and love for the land, the water and all species

together guide the Tribe's management of the San Carlos Apache Reservation, management of the land and associated natural resources and environmental protection of all plant and animal species. Tribal traditional ecological knowledge ("TEK") is a key and fundamental principle of species conservation and land management on the Reservation. TEK incorporates concepts of an ecosystem-based approach to land and species management and protection. It incorporates concepts of adaptive management by the Tribal government, the Tribal leaders and elders and the Apache people in land and species management. TEK is a paramount consideration and guiding principle in the drafting of the Tribe's various natural and cultural resource management plans throughout the San Carlos Apache Reservation. TEK also informs the Tribe's views on the management of the portion of the Apache's traditional aboriginal homelands which are now managed by Coronado N.F.

The legal mandates governing the management of national forests similarly requires the Coronado N.F. to maintain sustainable forest products, resources and services. The Draft EIS's general outreach to Indian Tribes and acknowledgment of their traditional and cultural values is gratifying. Of course, the devil is always in the details.

Traditional, Cultural and Sacred Places and Sites

As you know based upon Coronado N.F.'s consultations with the Tribe on the Mt. Graham International Observatory ("MGIO") special use permit, the Tribe is concerned that holy and sacred areas and sites are adequately protected. Again, the Tribe is gratified that the Draft EIS acknowledges the importance of *Dzil Nchaa Si'an* to the Tribe even though the Tribe continues to remain opposed to the MGIO, and cannot support the permit. In part, the Tribe views the MGIO as a failure of Coronado N.F. and the Tribe to engage in government-to-government consultations under prior 1986 Coronado National Forest Plan (1986 Plan) before MGIO was first constructed. The 1986 Plan paid hollow lip service to "[p]rotection and preservation of the inherent right of freedom of American Indians to believe, express, and exercise their traditional religions" and "[c]oordination with the land and resource planning efforts of other Federal agencies, State and local governments, and Indian Tribes."

It is important to the Tribe that such failures do not recur. Accordingly, the Tribe opposes the "No Action" alternative presented in the Draft EIS.

The National Historic Preservation Act (NHPA) requires that federal agencies consult at all stages with any "Indian tribe . . . that attaches religious and cultural significance" to traditional cultural properties. *See* 16 U.S.C. §470(a)(d)(6)(B). In addition, government agencies are required under the NHPA to, among other things, assess the effects of any undertaking on eligible cultural and/or historic properties under the NHPA and avoid or mitigate any adverse effects. *See* 36 C.F.R. § 800.5. The Tribe believes that it is important for Coronado N.F. and the Tribe to identify and protect all such eligible cultural and/or historic properties. The Tribe believes it is important to identify any additional sites within Coronado N.F. that are eligible for inclusion in the National Register of Historic Places, including Traditional Cultural Property under Section 106 of the NHPA. *See* 36 C.F.R. § 800.4 (implementing Section 106 of the NHPA and requiring acting agency to engage in a reasonable "good faith effort" to identify historic properties within the area of potential effects for their undertaking).

The Tribe also believes it is important to identify any sites within the meaning of "sacred sites" under Executive Order 13007, *Protection of Indian Sacred Sites*, May 24, 1996, 61 Fed. Reg. 26771, as well as pursuant to the American Indian Religious Freedom Act, 42 U.S.C. § 1996 *et seq.* (AIRFA). As you know, AIRFA requires that the policies and actions of all governmental agencies strive to eliminate interference with the free exercise of American Indian religion, based on the First Amendment, and to accommodate access to and use of religious sites to the extent that the use is feasible. The Tribe desires to

work with Coronado N.F. to accomplish goals which will allow our Tribe's members access to sacred, holy, traditional, cultural and heritage resource sites, in the least intrusive manner possible.

Other laws which mandate and regulate this process include the Religious Freedom Restoration Act of 1993, the Archeological Resources Protection Act of 1979, the 1990 Native American Graves Protection and Repatriation Act and the United Nations Declaration on the Rights of Indigenous Peoples.

Four Traditional Guiding Principles

The Tribe through the Elders Cultural Advisory Council has developed Four Traditional Guiding Principles used to manage our Tribal lands. The Tribe feels strongly and recommends that the Coronado N.F. also use these Four Guiding Principles in management decisions and then identify them in the Coronado N.F's Management Plan.

1. **Respect all aspects of the natural world.** The base of traditional Apache culture is maintaining strong and healthy relationships with all of the elements of the natural world; with one's friends, relatives, and community; and with one's self. This requires an in-depth ecological education, whether traditional, White, or both.

2. **All activities must ensure the long-term health of the natural world, especially emphasizing the prime importance of water.** The traditional guidelines governing land-management practices – such as agriculture, hunting, wild food and natural resource harvesting, and obtaining water for drinking and irrigation – emphasize minimizing impacts on the natural world, and preserving the most natural state of the land as much as possible. This includes, above all, ensuring the long-term health of natural water resources. *We must resolve to utilize and profit from natural resources without harming them.*

3. **All activities must benefit the entire community.** We all belong to the land. All activities impact the natural world, and affect us all. We must ensure that our activities are for the benefit of all, by working openly together as a community.

4. **Economic activities must be broad-based and varied.** Apaches have survived all kinds of climatic extremes, both environmental and economic, by depending on a multitude of economic endeavors – even when neighbors have perished. Traditional culture emphasizes distributing economic sustenance over a broad range of practices – such as agriculture, hunting and gathering, and trading – rather than emphasizing just one. This creates a healthy buffer to environmental and economic crises.

The biggest threat to our National Forests would be from not having a full understanding of their place within the natural world. The traditional Apache understanding is that plants, animals, water, land and humans, all function together in the ecosystem, like parts of a clock. We were taught to respect these resources. Modern society has lost the understanding that as the human population grows and cities expand, the ever increasing need for more water and resources adds to the pressure of degrading the ecosystem. Pre-European settlement conditions have been used to describe a healthy ecosystem and we use these conditions as a measure for ecological health.

Ecological succession is non-linear. The processes that brought us to the present condition forever altered the rules of response. For example, the Wallow Fire, although human caused, played a natural role in an unhealthy forest. The devastation of the Wallow Fire was measured in the millions of dollars, as humans easily associate measurement by monetary value; however, the fire did start a new beginning in the natural world.

The Tribe recommends the use of proper silvicultural treatments to mimic natural disturbance caused by fire, insects or pathogens, especially prescribed burning. Restoring the ecosystem to pre-European conditions should never be attempted all at once. Rather, resource managers should tread lightly and observe the responses of the natural world. Keeping the land in as close to a natural state as possible will have harmonious effects for plants, animals, water, land and humans. Our Tribe would welcome the opportunity to help you learn how to manage the land in a responsible and sustainable manner by sharing historical information which guides our current Tribal goals.

Tribal Memoranda of Understanding

The Tribe believes that it would be in the interests of Coronado N.F. and the various Indian Tribes with which Coronado N.F. has consulted to include a provision in the Draft EIS calling for a Memorandum of Understanding ("MOU") with the various Indian Tribes. Such MOUs would identify the processes by which the Indian Tribe and Coronado N.F. would engage in government-to-government consultations. Such MOUs would have several advantages for Tribes and Coronado N.F. and the Ranger Districts.

Tribal MOUs would ensure the early identification of the types of actions proposed by Coronado N.F. or by other entities that could impact tribal relations and resources during the life of the management plan. MOUs could identify the geographical areas of Coronado N.F. of importance and significance to individual Tribes. The MOUs could further identify the activities of Coronado N.F., the Ranger Districts and other entities which would benefit from government-to-government consultation and which activities would require little or no consultation. In addition to ensuring meaningful consultations, Tribal MOUs would result in cost and time savings for both Coronado N.F and the Tribes by engaging in more efficient consultation processes.

The Tribe is interested in engaging Coronado N.F. in devising the parameters of such an MOU and would gladly work with Coronado N.F. personnel in this regard.

Climate Change

The Tribe supports the Draft EIS's Proposed Action and Alternative 1 inclusion of new directions to move Coronado N.F. toward achieving the desired conditions of resilience and adaption to the effects of climate change for each resource potentially affected. The Tribe requests that Coronado N.F. consider the Four Guiding Principles addressed above when addressing climate change issues.

Opposition to Alternative 2

The Tribe opposes Alternative 2 because it increases motorized recreation. In addition, alternative 2 does not propose the new wilderness and research natural areas that the Proposed Action and Alternative 1 recommend.

Preference for Alternative 1

The Tribe prefers Alternative 1 as opposed to the Proposed Action because of Alternative 1's inclusion of much more additional acreage for designation as wilderness. However, as noted earlier, the Tribe reserves the right to comment further upon the Proposed Action and Alternative 1 after it has had an opportunity to more completely assess the Draft EIS.

Clarification of Notification Requirements Under Modified Alternative A

Modified Alternative A §219.6(a)(2) was changed to include the language, "Eliminates the requirement for formal notification of an assessment, and instead requires responsible officials to

coordinate or provide opportunities for the regional forester, State and Private forestry, Research and Development, Tribes, Alaska Native Corporation, other partners, and the public to consolidate existing information of the assessment." The Tribe is opposed to any provisions which seem to circumvent or minimize the vital responsibility of federal agencies to consult with Tribal governments at all stages of policy development and implementation, which this seems to do. Without further clarification of this section, the Tribe cannot support it.

Thank you for keeping the Tribe informed about Coronado N.F.'s activities on traditional Apache lands. The Tribe looks forward to its continued working relationship with Coronado N.F.

Sincerely,

SAN CARLOS APACHE TRIBE

Terry Ramble
Chairman

Cc: John Bush, Vice Chairman
Tribal Council Members
Dee Randall, Forest Manager
Vernelda Grant, Director/Tribal Arch./THPO
A.B. Ritchie, Tribal Attorney General

White Mountain Apache Tribe

Executive Office of the Chairman
White Mountain Apache Tribe
P.O. Box 1150 • Whiteriver, Arizona 85941
PHONE (928) 338-2500 .FAX: (928) 338-1514

RONNIE LUPE
Chairman

February 20, 2014

Mr. Jim Upchurch
Coronado National Forest Supervisor
ATTN: Forest Plan Revision
300 W. Congress Street
Tucson, AZ 85701

Dear Mr. Upchurch:

The White Mountain Apache Tribe appreciates the opportunity to comment on the proposed Land and Resources Management Plan and programmatic draft environmental impact statement (DEIS) for the Coronado National Forest Ndee (Western Apaches) have longstanding and powerful cultural and spiritual ties to all of the lands, mountain ranges, water sources, and ecosystems within the Coronado National Forest.

The Tribe has been clear and consistent in advising the U. S. Forest Service, Coronado National Forest, and other federal and state agencies responsible for the management of our aboriginal territory about the high significance of our ancestral landscapes and sacred sites. The Tribe has also been and consistent about the American Indian fiduciary and public trust mandates to protect these lands and sites from the many threats posed by disrespect for plants, animals, minerals, waters, and Native American heritage.

The White Mountain Apache Tribe has also been clear and consistent supporting interests asserted by the San Carlos Apache Tribe, the Yavapai-Apache Nation, the Hopi Tribe, Zuni Pueblo, Four Southern Tribes, the Navajo Nation, the Tonto Apache Tribe, the Apache Survival Coalition, the Mount Graham Coalition, Apaches for Cultural Survival, and Apache Mountain Spirit Runners regarding the unique and irrevocable significances of the major mountains under Forest Service trusteeship, especially Dzil Nchaa Si An (Mount Graham) and Dzil Cho (San Francisco Peaks).

In particular, White Mountain Apache Tribe Council Resolution 12-2003-196, which in effect calls for the removal the Mount Graham telescopes and the restoration of the damages have caused and are causing. A copy of Resolution 12-2003-196 was provided to the Forest Supervisor at that time, and referenced numerous times since in communications to the Forest Service in regard to various activities affecting Dzil Nchaa Si An.

ln recent decades the White Mountain Apache Tribe has acted as a constructive participant in Forest Service consultative and administrative processes relating to our aboriginal lands and sacred mountains. The Tribe has collaborated with Forest Service and other agencies, working

within the scope of federal laws often antithetical to Ndee interests. The Tribe has been repeatedly assured by federal officials that they have understood our positions and their trust responsibilities to Indian people, tribes, and ancestral lands. In previous statements and in the proposed land management and DEIS we read of Forest Service commitments to the integrity and vitality of the natural and cultural resources of public lands-foundations of good governance and appropriate steward ship, to be sure.

The Ndee and White Mountain Apache Tribe always welcome the sorts of assurances contained in the "Tribal Relations" section of the Draft Land and Resource Management Plan and in that plan's many references to the promotion of ecosystem restorations and resiliencies. We will continue to observe Forest Service actions and await the arrival of the evenhandedness, good faith, and attention to trust responsibility that have been repeatedly pledged in the documents under review and revision.

At the same time, our detailed knowledge of Forest Service lands and decisions lead us to question Forest Service willingness and ability to make good on these pledges and commitments. Despite our patience and numerous attempts to guide Coronado staff and other Forest Service officials, however, we find that Forest Service stewardship and fiduciary pledges are seldom backed up by good decisions and right actions. We are saddened and offended by much that we see on the ground on Coronado National Forest lands: looted and desecrated historic properties and sacred sites, disrespectful and incompletely mitigated mineral and timber extraction, rampant and under-regulated off-highway vehicle use, and a general lack of management and enforcement actions that bring about and assure ecosystem health.

More specifically, Forest Service decisions to enable and perpetuate the telescopes on Mount Graham, the mining development of Oak Flat and Rosemont, and the use of wastewater on the San Francisco Peaks are evidence of ongoing and especially harmful disrespect, desecration, and destruction of our ancestral lands and our cultural heritage. Disrespect for our lands, our peoples, and our cultures is apparently escalating as the Forest Service continues to abandon so much of its public and tribal fiduciary responsibilities in service to powerful industrial permittees like the University of Arizona, Augusta Resource Corporation, Rio Tinto, and Snowbowl. Nowhere do federal law and policy require the Forest Service to prioritize and encourage extractive and profit-driven uses of public lands, yet this pattern in Forest Service administrative culture and executive decision making is unmistakable. In fact, we are not aware of a single instance in which USFS has followed either the letter or the spirit of the law to “protect the physical integrity of” American Indian sacred sites. From our vantage, the historical and ongoing Forest Service failures to attend to Indian and public trust responsibilities appear traceable to a lack of willingness to make tough decisions that limit and regulate the proponents of disrespect and destruction.

The Tribe regards the proposed land management plan and programmatic draft environmental impact statement (DEIS) for Coronado National Forest primarily as an opportunity to institutionalize and operationalize Forest Service stewardship mandates and American Indian trust responsibilities. The proposed plan makes clear that Coronado National Forest is aware of the diverse and abundant values embedded in the Forest and is aware of the its fiduciary and stewardship duties. The Tribe's specific comments on the proposed plan and DEIS respectfully demand that Coronado National Forest, acting as our federal trustee, translate this awareness into action to protect the cultural and historical foundations for our Ndee way of life and the wellbeing of all people and communities--Ndee and non-Ndee—who rely on Coronado National Forest lands for water, food, shelter, guidance, and inspiration.

The Tribe submits the following comments on the proposed land management plan and programmatic draft environmental impact statement (DEIS). The Tribe requests revisions of these documents to include:

1. More general and specific provisions for reversing and restoring the desecration and damage that the Forest Service has caused or allowed permittees to cause on Coronado National Forest lands. Please give particular attention to damages to all springs and summits.
2. More and better identification and assessment of sites, districts, and landscapes having cultural and religious significance to American Indians remains. The standard of 200 acres per year is inadequate and inappropriately focused on archaeological resources and values. The White Mountain Apache Tribe wants inter-tribal and inter-agency collaborations to identify the full range of cultural and historical values linking Coronado National Forest lands with Chiricahua Apache, Hopi, Navajo, O'Odham, Pima, Zuni cultural and religious traditions. Collaborations should embrace and provide meaningful protection for sacred mountains, sacred springs, and other traditional cultural properties eligible for the National Register of Historic Places. The Forest Service, in collaboration with the tribes of the Western Apache Nation and other affected federally recognized tribes, should prepare one or more multiple property nominations to the National Register of Historic Places for significant Western Apache sacred sites.
3. More specific provisions for getting more Ndee personally involved in on-the-ground management, especially in the restoration of sacred mountains, springs, and plant food gathering areas. The Tribe recognizes Coronado National Forest Heritage Program staff progress in this regard and wants to see this reflected in the planning documents.
4. Specific plans to eliminate private and institutional permittee interests as driving forces in land, resource, and fire management. The recent history of Forest Service land management confirms that special permittee interests are primary forces dictating Forest Service management decisions and actions, especially in the Pinaleño Management Unit, an area formally determined to be eligible for the National Register of Historic Places due to significance in Ndee culture and spirituality. Catering to astronomers and cabin owners is at odds with Forest Service public trust duties as well as fiduciary duties to tribes and American Indians. The management plan should enable and advance the eventual elimination of all long-term special use permits that entail substantial structures or any other sustained ecosystem alterations.
5. Specific plans for National Environmental Policy Act review of the proposed special use plan renewal for the Mount Graham telescopes. The Forest Service must identify and analyze the full spectrum of biophysical and socio-cultural effects from MGO operations and prepare a specific, fully enforceable plan for avoiding and mitigating the adverse effects from these operations. With or without the environmental impact statement that is clearly needed in professional land management practice as well as mandated by law, the proposed management plan should stipulate, per the terms of White Mountain Apache Tribe Council Resolution 12-2003-196, no expansion of the existing footprint of the telescopes as well as dates and details of full restoration of the landscapes affected by the telescopes. The management plan should also stipulate the end of the use of harmful lasers by the astronomers. Statements from individual Ndee cultural practitioners and elders have confirmed that the laser beams are further interfering with prayers and related spiritual processes. Please prohibit these and other intrusive industrial applications.

6. Specific plans for the completion and implementation of a revised Mount Graham Red Squirrel Recovery plan. This squirrel has substantial significance in Ndee cultural and oral traditions and merits priority management consideration ahead of industrial permittees.
7. Plans for the development, in collaboration with Ndee tribes and perhaps other affected tribes, a co-management agreement for the Pinaleño Management Unit.
8. Plans and guidelines for balancing truly irreducible adverse effects from mining and sacred site desecrations with the respectful protection and restoration of comparable areas or values (i.e., off-site mitigation). The planning documents should include specific principles to be used in treating damaged and desecrated land surfaces, streams, and springs.
9. At least one environmental impact statement alternative that analyzes and maximizes the use of American Indian management principles and practices as the basis for Coronado National Forest management practices and approaches. Non-Indian practices and principles appear to be responsible for the ongoing ecological deterioration of the Coronado National Forest.

The White Mountain Apache Tribe looks forward to seeing Forest Management Plan revisions and final environmental impact statement confirmations of Coronado National Forest commitments to American Indian and public trust responsibilities. Far more importantly, the Tribe looks forward to the first steps in a long-awaited program of on-the-ground actions to protect the physical integrity of our sacred sites, especially Dzil Nchaa Si An, and to restore the ecosystems across Coronado National Forest that have been damaged, degraded, and desecrated by disrespectful management and use.

Please continue consultations with the White Mountain Apache Tribe through communications with Ramon Riley and Mark Altaha.

Sincerely,

/s/ *Ronnie Lupe*

Ronnie Lupe
Tribal Chairman

cc: San Carlos Apache Tribe
Arizona State Historic Preservation Officer
Intertribal Council of Arizona Ramon Riley, WMAT
Mark Altaha, WMAT

Appendix J – Arizona Game and Fish Department Comment Letter and Responses

The State of Arizona
Game and Fish Department
5000 W. Carefree Highway
Phoenix, AZ 85086-5000
(602) 942-3000 • WWW.AZGFD.GOV

March 3, 2014

Jim Upchurch
Forest Supervisor
Coronado National Forest
300 W. Congress
Tucson, AZ 85701

Dear Jim:

The Arizona Game and Fish Department (Department) has reviewed the Draft Forest Land and Resource Management Plan (LRMP) and Environmental Impact Statement (EIS) and provides comments in two attached tables, one for the LRMP, and one for the EIS.

The Department appreciates the opportunity to comment on the draft LRMP and EIS and provides as thorough review as possible given overlapping Forest review priorities for this LRMP and the Rosemont Mine EIS. In general, the documents are well written and provide the reader with a clear understanding of the future of activities on the Forest. I did want to point out though that the Department would have appreciated the opportunity for greater involvement in the development and review of the LRMP, including participation on Interdisciplinary Teams and being afforded Cooperating Agency status as provided for in our Master Memorandum of Understanding (MOU) with the Forest Service. Further, the quality of the documents would have been improved with enhanced involvement from Department staff. The Department recommends facilitating better collaboration and removal of unnecessary obstacles such as prohibiting the Department from preliminary review of the plan outside of the confines of your offices. Federal laws including NEPA, Fish and Wildlife Coordination Act, Federal Advisory Committee Act, and our MOU clearly direct better Forest Planning coordination with the Department which has statutory authority and subject matter expertise. The Department's collaborative involvement and review provides the public and the Forest with a more comprehensive, defensible, and accurate analysis of impacts to natural resources including state trust resources.

I also wanted to raise an issue of concern with the overlapping nature but separate release of LRMP and Travel Management Plan (TMP) planning. This incongruous approach makes it very difficult for the Department and stakeholders to accomplish a proper review of both documents. In the attached comments table for the LRMP, the Department identifies a number of places where the LRMP appears to be inconsistent with the travel management planning as understood from our involvement with that process. However, without the TMP it is impossible to fully

analyze effects. For example, the small, imprecise maps showing Ecosystem Management Areas in the LRMP do not afford the amount of detail needed to understand where land use zones and proposed Wilderness may contradict or preclude TMP decisions. Even within the LRMP there are statements that, on one hand, imply that the TMP makes implementation level decisions on road designations and motorized travel prohibitions but, on the other hand put forth standards which seem to make those decisions prior to TMP availability. The Department strongly recommends the Forest TMP be included in the LRMP process for better consistency and public review.

The Department has multiple concerns with Wilderness, Recommended Wilderness, and Wild and Scenic designations where the Department's ability to effectively manage wildlife resources may be negatively and unnecessarily impacted. Further, access in southeastern Arizona is a serious concern to the Department and our stakeholders and additional restrictions to vehicular access is not warranted at this time. Also, any language regarding Forest Service permitting for the collection of animals must be clarified throughout the document to accurately reflect the Arizona Game and Fish Department authority regarding take of state trust species.

The Department provides the following issues of general concern:

- Locatable Mineral Withdrawals have been all but eliminated from further use by the Forest. The Department believes this is a short-sighted approach and eliminates an important management tool in protecting sensitive wildlife resources.

  Response: Issue addressed in detailed comments

- Inconsistencies exist within the plan and between the EIS and LRMP which must be reconciled in the final documents. Both documents need to be reviewed for consistency of terminology and definitions (See specific comments attached). For example, a number of rare or endangered species are characterized as common in the LRMP. Also, the definition of Wild Backcountry in the EIS appears to be from a previous draft while the LRMP has been modified to be consistent with the Department's recommendations.

  Response: Inconsistences were corrected in both the Plan and EIS.

- The Department is concerned that the Forest has no guideline protecting or maintaining authorized routes connecting to existing roads on State Trust Land. This may lead to public access issues, and the Department offers to assist in obtaining legal access across State Land.

Response: Issue addressed in detailed comments

- The Forest should amend the plan and DEIS to allow motor vehicle use off the designated travel system limited to single trip use to retrieve legally taken big game species where such use does not negatively impact soils or vegetation.

Response: Issue addressed in detailed comments

- One of the key issues discussed at our recent Coordination Meeting was the need for consistency between forests to avoid confusion from legitimate land users. It would be helpful to add consistency on issues such as TMP and changing land status to wilderness.

The Department thanks the Forest for the opportunity to provide input on the LRMP and EIS. Please direct any questions regarding this letter to John Windes in our Tucson office at jwindes@azgfd.gov or 520-388-4442.

Sincerely,

/s/ *Jim de Vos*

Jim de Vos
Assistant Director-Wildlife Management

attachments

Arizona Game and Fish Department Comment:

Wild Backcountry on page 28.

"Suitable uses specified for the Wild Backcountry Land Use Zone are livestock grazing, harvesting of timber for restoration purposes, mountain biking, and collection of forest products and fuelwood. Off-highway vehicle (OHV) recreation, developed recreational facilities, and timber production are not suitable uses."

This conflicts with the LRMP page 95 which states: "this land use zone offers similar areas that are accessed by primitive roads or motorized trails and are used for a wide variety of activities, both recreational and other, including enjoyment of scenery, escape from the crowded areas, hunting, off-highway vehicle use, dispersed camping, hiking, horseback riding, mountain biking, mining, and cutting firewood."

Arizona Game and Fish Department Recommendation:

The Department cannot support the first excerpt from the EIS and insists that the LRMP be reconciled with the FEIS using the definition of acceptable uses from the LRMP to include motorized dispersed camping, hunting, OHV use, and cutting of firewood.

Response: The words “OHV recreation” have been removed from the EIS document.

Suitable uses specified for the Wild Backcountry Land Use Zone are livestock grazing, harvesting of timber for restoration purposes, mountain biking, and collection of forest products and fuelwood. Developed recreational facilities, and timber production are not suitable uses.

Arizona Game and Fish Department Comment:

Roaded Backcountry on page 28.

"This zone is not suitable for OHV trails". The FEIS conflicts with the LRMP, which states that the roaded backcountry is managed for a balance of dispersed motorized and nonmotorized uses. OHV trails do not conflict with this and may aid in managing this balance by separating users.

Arizona Game and Fish Department Recommendation:

The Department recommends reconciling the language in the FEIS with the LRMP to use the language from the LRMP.

Response: Removed the words “OHV Trails” from the EIS document to clear up confusion between EIS and Plan.

Suitable uses specified for the Roaded Backcountry Land Use Zone include livestock grazing, motorized access on designated roads, motorized dispersed camping, mountain biking, recreation facilities, harvesting of timber in conjunction with restoration projects, and collection of forest products and fuelwood. This zone is not suitable for timber production

Arizona Game and Fish Department Comment:

Elimination of Mineral Withdrawal from the Forest Plan – page 440 of Draft EIS.

The proposed action establishes desired conditions that support administration of mineral activities under current laws. Consistent with regulations and policy, environmentally sound

minerals development is emphasized. Compliance with law and regulation is also emphasized without reiterating specific requirements. The draft revised plan under the proposed action does not list areas recommended for mineral withdrawal, but rather sets desired conditions to protect resources that are very limited or unique and that are not already protected by law, regulation, and policy for specially designated areas (i.e., wilderness). This management approach contrasts with recommendations for withdrawal made in the 1986 plan, because this approach would protect resources by means other than withdrawal."

The Department finds this the most egregious failing of the EIS and LRMP. The above statement appears disingenuous and designed to mislead the public into believing that surface resources can be protected through means other than Locatable Mineral Withdrawal. The Department finds that the Forest has neglected to appropriately address protection of sensitive resources including important wildlife habitat by not describing the appropriate use of Locatable Mineral Withdrawals. The only instrument that effectively protects renewable resources from mineral entry is Locatable Mineral Withdrawal. This is the purpose of a withdrawal. Without withdrawal, sensitive resources are subject to the 1872 mining law and no amount of existing law, regulation, and especially policy, will protect those resources without mineral withdrawal.

The Arizona Game and Fish Commission's policy on multiple use (A2.18) states that "Multiple-use practices must not occur at the expense of the productivity of the land, nor the sustained yield of the renewable resources." While the Department recognizes multiple use as the desired manage approach to public land management, inappropriately located mines "occur at the expense of the productivity of the land." Sensitive resources must be protected through judicious use of mineral withdrawal.

Arizona Game and Fish Department Recommendation:

The Forest should strike all references to phasing out mineral withdrawals and should identify appropriate resources needing protection via Locatable Mineral Withdrawal.

Response: The 1986 Plan had a list of mineral withdrawals but no action has been taken on those withdrawals. Mineral withdraw is still a tool we can use, however, the withdrawal process is cumbersome and time consuming. We have found that applications for mineral withdrawals are more successful when it can be demonstrated that all other means of protection have first been investigated. Therefore, our Desired Conditions are written so that a proposed mineral activity would be improbable in those areas.

Arizona Game and Fish Department Comment:

Wildlife - The Wildlife sections of the plan need further review and editing by the Forest. The Department has found numerous errors and inconsistencies requiring editing. For example:

In the first paragraph on page 5 the Chiricahua fox squirrel is listed as a rare species. On page 18 the fox squirrel is referred to as the Mexican fox squirrel, and at the bottom of page 33, it is listed as common in the Madrean Encinal Woodland habitat type. The Plan should select one common name for this species of fox squirrel and use that exclusively. Also, the species is not rare in the Chiricahua Mountains, but neither is it common in Madrean Encinal Woodlands on the Coronado National Forest. To be accurate, it is more commonly found in pine-oak associations solely within the Chiricahua Mountains on the Coronado National Forest.

The Mt. Graham red squirrel is also listed as a rare species in the first paragraph on page 5 of the Plan and later called a common species in spruce-fir on page 48 (second paragraph). The Mt.

Graham red squirrel is listed as endangered under the Endangered Species Act and cannot be considered common.

The twin-spotted rattlesnake is listed as a common species of spruce-fir habitats in the second paragraph on page 48 of the Plan. The twin-spotted rattlesnake is not a common species anywhere and is found primarily on talus slopes and should therefore be included in the Biophysical Features section starting on page 53, and not in the section noted above.

Under Riparian Areas on page 52, gray hawk, elegant trogon, eared quetzal, Mexican garter snake, Wet Canyon talussnail and Tarahumara frog are listed as common species. These are all in fact uncommon to extremely rare.

Arizona Game and Fish Department Recommendation:

The Forest should thoroughly review the wildlife sections of the plan in coordination with the Department. Amend the plan to use consistent naming conventions for all species. Amend the plan to replace rare species with common ones as examples where needed.

Response: The word common has been removed where noted in the document and species names have been corrected. We do not think it improper to list rare species that rely on certain habitat types instead of just common species. It underlies the importance of the habitat for species conservation. All references to the endemic Chiricahua squirrel have been corrected and the species vegetation community association has been redirected to the Madrean Pine-Oak woodland section. The species vegetation community association for the twin-spotted rattlesnake was expanded to include Mixed conifer, ponderosa pine-evergreen shrub and biophysical features (talus slopes).

Arizona Game and Fish Department Comment:

Goshawk Guidelines - Beginning on page 22 (Mid-Scale), and throughout the document, the Plan references forest conditions in goshawk nest areas, post-fledging family areas and foraging areas.

Arizona Game and Fish Department Recommendation:

These are all terms and management strategies identified in the Management Recommendations for the Northern Goshawk in the Southwestern United States (1992) and should be referenced as such.

Response: Reference added.

Arizona Game and Fish Department Comment:

Inconsistencies within Vegetation Descriptions - The environmental factors listed in the General Description sections for each vegetation community are inconsistent. For example, on page 36 the Madrean Pine-Oak Woodland General Description lists a fire frequency and a management indicator species (acorn woodpecker). These two elements were not identified in any of the previous Vegetation Community descriptions and an indicator species is not listed for any of the subsequent Vegetation Community General Descriptions except in the Mixed Conifer Forest and Natural/Constructed Water Sources.

Response: Thirty-three management indicator species (MIS) were identified in the 1986 plan. Only three MIS were carried forward to the revised plan. The revised plan reflects the appropriate MIS identified in the vegetation descriptions.

This change was based on the following factors:

- Implementation of 1986 plan direction for species management has not been fully successful because the management indicator species list itself was flawed in that it listed species as management indicators despite the fact that there was no habitat for them on the Coronado or the species no longer existed there (nonextant).

- The management indicator species list also included guilds of species. However, the grouping of certain species in the guilds was inaccurate in some cases, because many of those co-listed in a guild do not have the same habitat requirements.

Arizona Game and Fish Department Comment:

The Madrean Pine-Oak Woodland section does not list snag densities or tree basal area in the Desired Condition section.

Response: "Desired Conditions" state: "snags are well distributed." Interpretation of this will occur at the project level based on site specific habitat needs.

Arizona Game and Fish Department Comment:

Though listed in all previous Vegetation Community Desired Conditions, from the Ponderosa Pine-Evergreen Shrub section on page 39 on through the Riparian Area section on page 52, the Plan does not list plant basal area, litter cover, or canopy covers. This is all valuable information relative to wildlife habitat and should be included in the Plan to assist in management and to maintain a consistent format.

Arizona Game and Fish Department Recommendation:

Amend plan to describe biotic communities and vegetation consistently with standard forestry metrics such as basal area, canopy cover, litter cover, etc.

Response: The vegetation "Desired Conditions" were developed at the Regional level and are based on many aspects. Where numerical ranges are not listed for basal area, canopy cover and litter, they can be established at the project level.

Arizona Game and Fish Department Comment:

In paragraph three on page 40 the effects of dwarf mistletoe on wildlife is difficult to gauge since it is based on the number of trees. Previous research has used a six class rating system to quantify dwarf mistletoe infection rates. Bennetts et al. (1996) found that bird species richness was positively correlated with dwarf mistletoe, which had a positive influence on wildlife habitat. They suggest that where management is not focused on timber production, control of dwarf mistletoe may not be justified, practical, or even desirable.

Arizona Game and Fish Department Recommendation:

Remove dwarf mistletoe abundance percentages from Desired Conditions.

Response: The paragraph referenced speaks to the *"composition, structure, and function of vegetation conditions are resilient to the frequency, extent, and severity of disturbances and climate variability"* in Ponderosa pine-evergreen shrub communities. While mistletoe has wildlife

benefit, we must balance this benefit with the risk of tree mortality it causes that can increase susceptibility to high intensity fire and reduced resilience.

Arizona Game and Fish Department Comment:

Montane Meadows - On page 51, within the Montane Meadows section, these meadows are described as vulnerable due to a changing climate since they will be susceptible to decreases in plant productivity from water limitations. On Mt. Graham many montane meadows are being used as campsites and the swift trail bisects several of them. From a wildlife habitat perspective, these meadows are important foraging areas for deer, turkey, black bear, etc. Based on their value to wildlife, fragmented nature, and the threats to their continued presence on the landscape, the Department requests additional Guidelines in this section.

Arizona Game and Fish Department Recommendation:

Add the following guidelines:

1. No new roads should be built in Montane Meadows and existing roads will be re-routed around them as opportunities to do so become available (this guideline is listed on page 73 under Motorized Transportation System.)

Response: Guideline two under Motorized Transportation System seems to cover this:

New road construction in meadows and wetlands should be avoided where physically or financially feasible. If these activities are unavoidable, they should be designed and implemented to minimize effects to waterflow, wetland recharge, and ecosystem function.

Arizona Game and Fish Department Recommendation:

2. No new developed campsites will be authorized in Montane Meadows.

Response: There is no Forest plan direction to add new developed recreation sites. Guideline 1 under “Montane Meadows” would apply to any future considerations:

“Management activities in meadows should not be allowed unless impacts to meadow soils and hydrologic function and native plant assemblages can be mitigated.”

Arizona Game and Fish Department Comment:

Animals and Rare Plants, Desired Conditions, Wildlife Linkages.

This section mentions wildlife linkages but doesn't reflect the challenges the Forest faces to improve, enhance, restore, and protect wildlife movement in the currently fragmented Ecosystem Management Areas (EMA) and along the forest boundary. Mines, powerlines, shrub-invaded grasslands, roads, trails, fences, disturbance, and development all fragment habitat and inhibit wildlife movement within the Forest.

Large projects can impact movement both within and between forest blocks requiring protection of movement corridors or enhancement of landscape permeability to allow for wildlife movement throughout the forest. Examples of activities that enhance landscape permeability are the retrofitting of fences; identifying and protecting important stopover habitat for migratory birds; identifying movement corridors between critical waters for amphibians and facilitating movement to maintain metapopulations; and controlling and mitigating movement of exotic invasives. In general, wildlife movement and connectivity is poorly addressed in the Plan.

Arizona Game and Fish Department Recommendation:

The Forest should address wildlife movement within EMA's as well as between EMA's and suggest approaches to maintain wildlife movement corridors, standards for permeability of fencing and infrastructure, both new and existing, and guidelines for evaluating and addressing permeability in all Forest activities and those activities under permit or lease. For example, new range fencing should meet AGFD standards for permeability, old range fencing should be required to be removed or replaced, and legacy fencing should be evaluated for permeability. New roads should require means to mitigate for permeability/fragmentary effects, and current roads and infrastructure should be evaluated for permeability/fragmentary issues and opportunities to ameliorate those issues. These approaches, standards, and guidelines should be reflected in the Forest Plan.

Response: The planning area is the forest itself; we lack jurisdictional authority to direct that movement corridors between EMAs be established; however we do have conditions for open space to work with willing landowners and jurisdictions between EMAs for wildlife connectivity. This is a goal we are working towards with partners. A guideline for range fences to allow for wildlife movement is shown in "Range Management" section under guideline three:

"Construction or reconstruction of livestock fencing and replacement of nonpermeable fencing where wildlife movement is restricted should be consistent with the appropriate state wildlife agency standards[1] for safe passage of wildlife and/or species-specific fencing guidelines developed at the local or regional level."

The effects of individual roads to wildlife movements is evaluated at the project level.

Under Motorized Transportation System, Desired Conditions reads:

"*Unneeded roads, as identified through the transportation analysis planning process, are closed and rehabilitated to reduce human disturbance to wildlife and to reduce soil erosion."*

Guideline 1 under "Vegetation Communities" section reads:

"Project design should provide for wildlife movement between treated and untreated areas to increase available habitat."

Under "Land Ownership Adjustments and Boundary Management" section, Desired Conditions reads:

"An interconnected network of undeveloped open space within and adjacent to the national forest provides opportunities for legal public access and corridors for wildlife movement and supports healthy ecosystems".

Arizona Game and Fish Department Comment:

Habitat Connectivity and Wildlife Linkages Generally - As we have seen with the Sunzia and Southline powerline projects, regional population growth in the United States is resulting in more

[1] For Arizona Game and Fish Department, refer to the most recent Wildlife Water Development Standards section on standard wildlife fence; for New Mexico Game and Fish Department, use available habitat or species-specific guidelines.

impacts to open space, even on public lands. The plan recognizes this and highlights these negative impacts and identifies open space as a priority. The second to last paragraph on page 9 identifies the need to protect and provide wildlife corridors between sky islands. On page 19 the Desired Condition for the Climate Change Response section is connectivity of metapopulations throughout the landscape. Similarly, the Animals and Rare Plants section on page 62 states that wildlife species are susceptible to habitat loss and fragmentation.

Arizona Game and Fish Department Recommendation:

Areas outside the Forest Boundary which provide significant habitat connectivity should be identified by the Forest as areas in need of protection from development. For instance, the Forest participated in the Aravaipa Ecosystem Management Plan but has not identified the area between the Aravaipa Wilderness and the Galiuro EMA as an area threatened with development.

Response: The Forest Service participates in collaborative partnerships that look at landscape scale planning efforts to identify important corridors. Forest plan components do not apply to lands outside the forest boundary.

Refer to "Open Space Management Approach" under "Land Ownership Adjustments and Boundary Management":

"Working with willing landowners, communities, local governments, and partners to promote voluntary open space conservation. Participating in local planning efforts regarding development or use of non-Federal lands as an information provider to help promote appropriate open space, access and recreation opportunities as well as to reduce ecological impacts and wildfire risks for communities."

Arizona Game and Fish Department Comment:

Guidelines for protecting northern goshawks may overly restrict human presence outside of the nesting period.

Arizona Game and Fish Department Recommendation:

The Department recommends providing a citation for a need to restrict human disturbance after August 1 as fledged young are typically independent before the month of August.

Response: Citation used: Management Recommendations for the Northern Goshawk in the Southwestern United States (1992) (https://www.fs.fed.us/rm/pubs_rm/rm_gtr217.pdf)

Arizona Game and Fish Department Comment:

Invasive Species - Within the Grassland Communities, Madrean Encinal Woodland, Wetlands, and Riparian Areas sections, there is no Guideline or even Management Approach listed for dealing with exotic species other than bufflegrass.

Response: Invasive species are defined in the plan as "alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health" (Executive Order 13112). Although there is only an objective for buffelgrass there are a number of desired conditions and guidelines and management approaches that are focused on invasive species as a whole. There may be new species that become a problem during the life of the plan than what are the focus today.

Many plan components cover "invasive species." Examples include:

Under Vegetation Communities, Desired Conditions:

"Native plant communities dominate the landscape, while invasive species are nonexistent or in low abundance."

Under Constructed Waters, Desired Conditions:

"If aquatic invasive species, such as American bullfrogs, northern crayfish, green sunfish, nonnative tiger salamanders, nonnative mollusks, and nonnative aquatic plants are present, their numbers are low and can be controlled".

The entire section "Invasive Species" covers "Desired Conditions, Objectives, Guidelines and Management Approaches."

Under Pusch Ridge Wilderness:

Standard: *"All areas treated for exotic invasive grass populations shall be monitored and re-treated as often as necessary to prevent reestablishment of the target invasive species."*

Management Approaches: *"Using the most effective combination of treatments available for invasive species containment and eradication to maximize effectiveness and minimize the amount of time required for management intervention."*

Desired conditions for all vegetation communities reflect a native plant community not invasive. These plan components focus on controlling present and future invasive plants.

Arizona Game and Fish Department Recommendation:

Other invasive species such as Lehmann lovegrass, salt cedar, and sweet resin bush should be specifically targeted for treatments within the Invasive Species section, page 66.

Response: There are currently active control efforts for sweet resin bush; there has been little to no demonstrated success for control of Lehmann lovegrass.

Arizona Game and Fish Department Comment:

The Department supports the progressive standards and guidelines the Forest has outlined for public access to the Forest. The Department supports the Forest's proactive measures to protect public access.

Arizona Game and Fish Department Recommendation:

The Department recommends maintaining the Standards and Guidelines for this section.

Response: Thank you for your comment.

Arizona Game and Fish Department Comment:

Standard 1: "Motor vehicle use is allowed on the designated system of roads and trails" and is "prohibited in all other locations, unless it is specifically authorized by law, permit, and/or orders issued by the Forest Service in conjunction with resource management and public safety actions."

Page 71 states "The motor vehicle use maps include designated roads, trails, and areas for each ecosystem management area. The designations include vehicle class, time of year of use, and any designations for motorized use associated with dispersed camping or game retrieval."

Arizona Game and Fish Department Recommendation:

The forest should strike (or modify) Standard 1 as it appears to contradict the previous statement (p71) which allows designations to be made via MVUM's and travel management plans.

The Forest should amend the plan and DEIS to allow motor vehicle use off the designated travel system limited to single trip use to retrieve legally taken mule and whitetail deer where such use does not negatively impact soils or vegetation.

Response: The words “game retrieval” were used only in reference to the information that can be shown on a MVUM map. To avoid confusion, the term has been removed from the page. As stated in the motor vehicle use maps (MVUM):

> “motorized vehicle use off designated roads and trails for the purpose of game retrieval is not permitted on the Coronado National Forest.”

Arizona Game and Fish Department Recommendation:

The Forest has stated in Travel Management meetings with the Department that authorized roads without legal access across State Trust Land must be removed from the system. The Department recommends the Forest reverse this position and add a guideline to the plan stating "all authorized roads connecting to existing roads on Arizona State Trust Land (STL) over which the Forest has not legal easement or right of way across STL will be maintained as part of the designated road system as long as users may legally use the those roads with an Arizona State Land recreation permit."

Response: Providing public access is an identified need in our plan. At the national forest boundary, there are about 300 motorized access points; less than one-third of these provide permanent legal access. Most access points are located at an interface of National Forest System and non-Federal lands (State, county, private, and other ownerships). Our objective under the “Public Access” is to:

“Increase the number of permanent legal access routes to and within the Coronado National Forest by resolving the legal status deficiencies of 40 to 50 existing and proposed National Forest System roads and trails, using a variety of methods every 10 years.”

More specific guidance and direction is better addressed in the travel management environmental analysis.

Arizona Game and Fish Department Comment:

The Department supports the publication of motor vehicle use maps (MVUM) as one means of educating and informing the public of the designated road system. However, for all practical purposes open roads should be numbered and signed and closed or restricted roads should be physically closed or gated. The casual and occasional forest visitor cannot be expected to possess and understand MVUM's and the Department does not support MVUM's as the primary indicator that any given route is legal or illegal for travel.

Arizona Game and Fish Department Recommendation:

The Department recommends adding as a guideline that all roads open to the public be numbered and signed and that all closed roads be physically closed with native material or gated and signed closed. All roads maintained for administrative access only should be gated and signed for authorized use only.

Response: The Coronado adheres to national and regional guidance in relation to both publication of the MVUM and also signing related to Travel Management. While we understand the Department's position on the matter we are obligated to adhere to the standards set forth by the USFS in this regard. Additionally, gating all roads not open to the general public for motor vehicle access would be prohibitively expensive and also require site-specific analysis and NEPA for such action to be implemented.

All National Forest System Roads are required to have a Route Marker displaying the road number at each road junction. This applies to both fully open-to-the-public roads as well as restricted-use roads (authorized use only). It is with the road numbers posted on the Route Markers that the public can determine whether the road is shown on the MVUM and therefore available for their use (unless seasonally closed—in which case that too is shown on the MVUM).

"Objective 3" under "Motorized Transportation System" supports your recommendation. "Decommission, close, and restore 3 to 10 miles of unneeded non-system roads annually throughout the plan period, except for roads identified for potential public access routes."

Arizona Game and Fish Department Comment:

Standard 3.f. requires all new and replacement towers to be self-supporting due to the reasoning that self-supporting towers "minimize land area impacts."

Arizona Game and Fish Department Recommendation:

Move to guidelines and specify that the least impacting method should be used.

Response: The existing guidance for towers on the Forest was developed using internal collaboration with fire resource personnel and should be adequate to address safety concerns.

Arizona Game and Fish Department Comment:

Standard 3. requires new and replacement antennas and towers to be below the height for which FAA requires lights because of the interference with the fire lookout tower "and aesthetics." i. requires towers meet color requirements set forth in the Coronado's Guidelines for "Recreation Residences."

The Department questions why the guidelines meant for recreational residences is being used for very different structures and suggests that these guidelines are ill suited for this purpose and that perhaps towers and antennas should not be regulated under the same guidelines as recreational residences.

Commercial and scientific towers and antennas can be deadly hazards to Department aircraft which often fly closer to the ground than most aircraft as regulated by the FAA due to the needs of surveying wildlife and other wildlife management activities which occur regularly and frequently. Moreover, these antennas may be hazardous to USFS aircraft fighting fires.

Arizona Game and Fish Department Recommendation:

These standards should be deleted and/or changed. The Department requests that the safety of our personnel and USFS personnel be placed above that of aesthetics and that all towers and antennas be required to be visible from the air and be painted to contrast with the ground or background when viewed from above or at height or otherwise marked or lighted to ensure visibility by low

flying aircraft. The following language is taken from AGFD wind guidelines, and can be adapted for this section:

APPENDIX C: Guidelines for Installation and Monitoring of Meteorological Towers and their Associated Infrastructure

Met towers (whether temporary or permanent) and their associated infrastructure have the potential to cause avian and bat mortalities resulting from mid-flight strikes with the tower guy wires. Studies have shown guy-wired towers can cause four times more bird mortality than towers without guy wires (Young et al., 2003) (http://www.west-inc.com/reports/fcr_final_mortality.pdf). While bats can also strike guy wires, the occurrence is much less frequent. In addition, the visibility of met towers is important for the safety of aircraft pilots at low flight elevations. To reduce the potential for bat and bird collisions, and to provide guidance for keeping pilots and personnel safe, AGFD has developed these recommendations:

AGFD requests all *permanent* met towers be unguyed, free standing structures. If monopole are not practicable, then free standing lattice towers with perching deterrents may suffice. If possible, AGFD also requests temporary met towers be unguyed, monopole, free standing structures.

- When guy wires are present, AGFD recommends attaching Bird Flight Diverters (BFDs) at spaced intervals along the length of multiple wires. At a minimum, four Aircraft Warning Markers (spherical or cylindrical, 36 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire. Research shows the attachment of BFDs can reduce bird collisions by as much as 86-89 percent (Pope et al., 2006) (http://www.chelanpud.org/documents/Burch_Final_Report_Vl.pdf). AWMs should be recognizable from a distance of at least 4,000 feet (1219m) in clear air and visible from all directions.

Response: Current standard specifies no guy-wires.

Arizona Game and Fish Department Recommendation:

- AGFD recommends all temporary towers are only on site for the minimum amount of time needed to monitor the wind resource. If towers are on site for more than 1 year, AGFD recommends carcass searches be implemented, especially during the bird migration period (see Chapter 5, Post-construction Monitoring and Reporting).
- If a temporary tower is going to become a permanent structure for the life of the project, AGFD recommends the tower(s) be included as part of the longer term (pre-construction and post-construction) monitoring program.
- AGFD recommends the applicant place acoustic monitoring stations on met towers in the proposed project area (Note: This will help collect bat activity information needed for pre-construction analysis). An acoustic monitoring station is defined as two acoustic detectors, one at "ground level" (approximately 1.5 meters above ground) and the other with an elevated microphone, ideally within the future rotor swept zone, but not less than 30 meters high. Reynolds (2006) and Lausen (2006) provide detailed guidelines for detector deployment and operation. Rainey et al. (2006) provides an in depth discussion of acoustic monitoring systems. Acoustic data collection objectives should strive to evaluate bat species composition and bat use of the project area nightly and across seasons to assess potential impacts.

- Work with AGFD to determine the number of acoustic monitoring stations needed to adequately cover the project area. The number of acoustic stations will depend on project footprint and habitat complexity.
- When siting met towers, avoid habitat features that congregate wildlife such as water resources, habitat edges, ridgelines, etc. At a minimum, AGFD recommend 100m setbacks from these features. This varies site to site dependent on the combination geographic features and wildlife resources.

AGFD Personnel Safety

- Low-level aerial flights can occur outside routine wildlife survey routes. GPS locations of all towers need to be provided to AGFD prior to construction to allow survey aircraft to avoid the towers. In addition, AGFD requests project proponents notify the Department when met towers are removed.
- When guy wires are present, AGFD recommends attaching Bird Flight Diverters (BFDs) at spaced intervals along the length of multiple wires. At a minimum, four Aircraft Warning Markers (spherical or cylindrical, 36 inches in diameter) should be placed 10 meters below the apex and BFDs be placed at 10 meter intervals along the length of each outer wire. AWMs should be recognizable from a distance of at least 4,000 feet (1,2l9 m) in clear air and visible from all directions.
- For all monopole towers, paint the top 30 feet of the tower in alternate orange and white paint. This does not apply to lattice towers or lit towers, both of which are more visible than monopoles.

Response: The existing guidance for towers on the Forest was developed using internal collaboration with fire resource personnel and should be adequate to address safety concerns. Some of the detailed recommendations provided by the Department may be more appropriate to consider on a project-level basis.

Arizona Game and Fish Department Comment:

Page 82, standard 14. "Limit nonpedestrian activities (e.g. bicycle and equestrian) authorized under special use permits to existing National Forest System trails and roads."

The Department questions the need for this standard. Would this limit hunting guides using pack animals and horses to trails and roads? The Department suggests that the variety of activities permitted under special use permits is great enough that this standard is unnecessarily restrictive and that such special use permits should evaluate uses on a case by case basis. The Department does not support limiting all "nonpedestrian" special use activities to trails and roads. This would also seem to limit the use of game carriers by licensed guides and outfitters to trails and roads.

Arizona Game and Fish Department Recommendation:

The Department recommends striking this standard and instead clarifying in guidelines or management approaches which activities should be limited to roads and trails and ensuring that licensed hunting guides and outfitters can utilize equines and game carriers off-trail.

Response: This standard has been removed.

Arizona Game and Fish Department Comment:

Grazing Guidelines on page 88.

Arizona Game and Fish Department Recommendations:

1. Add Santa Teresa and Pinaleño Mountain Ranges to areas restricted from domestic goat permits. Bighorn exist in the Santa Teresa Mountains, sufficiently close to the Santa Teresa's for goats to pose a threat.

Response: The following standard has been modified to add the Santa Teresa and Winchester EMAs:

"Grazing permits for domestic goats and/or sheep will not be issued in the Santa Teresa, Winchester, Galiuro and Santa Catalina EMAs to prevent the transfer of disease from domestic goats and sheep to wild populations of bighorn sheep."

Arizona Game and Fish Department Recommendation:

4. Wildlife fencing standards should be consistent with the State's Guidelines for Wildlife Compatible Fencing, not meet AGFD wildlife water standards. The Guidelines are currently found at the following web location: ttp://www.azgfd.gov/hgis/documents/110125_AGFD_fencing_guidelines.pdf

Response: Based on conversations with Department personnel on April 26, 2017, the current recommendation from the Department is to use direction for Standard Wildlife Fencing found in the Wildlife Water Construction Standards found at the following web location: https://www.azgfd.com/Portalimages/files/wildlife/watercatchments/wildlifewaterdevelopmentstandards2014.pdf

Arizona Game and Fish Department Comment:

Locatable Mineral Withdrawals - This guideline seems intended to discourage locatable mineral withdrawals. The Department is concerned that this guideline will unnecessarily hinder wildlife habitat protection efforts.

Arizona Game and Fish Department Recommendation:

The Department recommends removal of the guideline.

Response: In response to your comment, we changed the wording of the guideline to make it clear that it is not our intent to discourage recommendations for mineral withdrawal. We have found that applications for mineral withdrawals are more successful when it can be demonstrated that all other means of protection have been investigated.

Arizona Game and Fish Department Comment:

Locatable Mineral Withdrawals - The Department finds that a major flaw in the DEIS is the lack of a description of what areas are withdrawn from Locatable Mineral Exploration and development, which areas are recommended for continued withdrawal, and which areas are recommended for or potentially recommended for revocation.

Arizona Game and Fish Department Recommendation:

The Forest should thoroughly describe existing and potential locatable mineral withdrawals and potential withdrawal revocations.

Response: The Forest will provide a list of existing and potential locatable mineral withdrawals to the department.

Arizona Game and Fish Department Comment:

The Department finds that the Forest has neglected to appropriately address protection of sensitive resources including important wildlife habitat, by describing the appropriate use of Locatable Mineral Withdrawals. The only thing that protects resources from mineral entry is Locatable Mineral Withdrawal. This is the purpose of a withdrawal. Without withdrawal, sensitive resources are subject to the 1872 mining law.

Arizona Game and Fish Department Recommendation:

The Forest should prescribe Locatable Mineral Withdrawal as an appropriate means of conserving and protecting unique and sensitive resources and should list all special designations which should be withdrawn from locatable mineral exploration and development. The Locatable Mineral Withdrawals section on page 93 should also include, within the first bullet statement, EMA corridors as examples of unique resource areas.

Response: Approval of a withdrawal is at the discretion of the U.S. Department of the Interior, and the Forest Service may only make recommendations for mineral withdrawals. We have found that applications for mineral withdrawals are more successful when it can be demonstrated that all other means of protection have been investigated. Furthermore, while withdrawal from mineral location (for location of a mining claim) prevents the location of new claims, it does not inactivate existing mining claims.

See Management Approaches under Locatable Mineral Withdrawals:
“Preserve a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development. Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values.”

Arizona Game and Fish Department Comment:

Locatable Mineral Withdrawals

a. "Preserving a unique resource area where no reasonable alternative to a withdrawal will provide adequate protection and the area will not survive without undue damage or impacts caused by mineral development"

This language appears to overly restrict the use of Locatable Mineral Withdrawals to protect unique or sensitive resources.

Arizona Game and Fish Department Recommendation:

The Department recommends striking the first sentence in section "a" and replacing with language similar to "utilize locatable mineral withdrawals to preserve unique and sensitive resources where mineral development will cause undue damage or irreversible impacts to those sensitive resources."

Response: In response to your comment, we have found that applications for mineral withdrawals are more successful when it can be demonstrated that all other means of protection have been investigated.

Arizona Game and Fish Department Recommendation:

The Department further recommends revising the second sentence to read "Examples of unique and sensitive resources are research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and crucial wildlife habitat areas.

Response: Changes made to plan under “Locatable Mineral Withdrawals”, “Management Approaches”: “Examples of unique resource areas are: research and experimental areas, botanical and zoological areas, cultural, historical, and archaeological areas, paleontological and geological areas, and other areas with special characteristics or unique values.”

Arizona Game and Fish Department Comment:

Wildlife in Wilderness - Within the Wildlife in Wilderness section on page 104, the Standards and Guideline all refer to wildlife decisions that are not under federal authority. Any wildlife introductions or reintroductions are decisions of the Department's and not subject to the US Forest Service or a Land and Resource Management Plan. As stated in the Wilderness Act of 1964, "Nothing in this Act shall be construed as affecting the jurisdiction or responsibilities of the several States with respect to wildlife and fish in the national forests (16 U.S.C. 1133)."

Arizona Game and Fish Department Recommendation:

These Standards and the Guideline must be removed. Similarly, on page 129 under the Chiricahua EMA, Standard 2.a. states that a special use permit is required for any animal collection. Once again, this is the purview of the Department and not the Forest, whether through the issuance of a hunting permit-tag or a scientific collecting permit. This Standard must be changed.

Response: See responses below.

Arizona Game and Fish Department Comment:

Standard 1 "Nonnative species shall not be introduced into any wilderness area"

Standard 2 "Reintroductions shall only occur when a species is determined to be indigenous to the area and when it was extirpated by human-induced events."

These two standards are unnecessary and may create problems with differing definitions of "native" and "indigenous." The Department, which has management authority over wildlife, manages for some nonnative species on the Coronado Forest. This standard unnecessarily puts the Forest and the Department at odds over management authority of state trust responsibility species on federal lands. Moreover, some species may not be considered "native" or "indigenous" because they are not genetically pure strains or because said species cannot be definitively shown to occur in the habitat where reintroductions occur. For instance, in the Pinaleños, five species of

trout are currently managed by the Department. Two of these are "native" to Arizona, but one of these species may be a different race than historically occurred in the Pinaleños, and one or all may be considered "nonnative". The Department recognizes that often the indigenous species is the most obvious choice for reintroduction but sometimes there are reasons why this is impossible or ill-advised. In some cases, native species may have been extirpated but similar species may fill an important ecosystem niche. This is especially true when taxonomic classifications are continually changing. Ramsey Canyon leopard frogs are now considered the same species as Chiricahua leopard frogs and this species is currently in flux and likely will continue to be. Other species this could cause issues with are pronghorn antelope, dusky grouse, Gila trout, Apache trout, and many others.

Making a standard that reintroductions *shall only occur when* a species is determined to be extirpated by human-induced events is biologically ignorant and practically infeasible. Such a standard is designed without regard to the reality of the limits to scientific knowledge. All extirpations are likely to be the result of complex interactions from a number of factors. Quantification of the importance of any one of those factors, including anthropogenic influence, in the extirpation of a species would be extremely difficult if not impossible given the state of our knowledge.

Arizona Game and Fish Department Recommendation:

Strike Standard 1 and Standard 2 from Wildlife in Wilderness.

Response: Our standards were modified as follows (including footnote):

1. Non-indigenous[2] species shall not be introduced into any wilderness area.

2. Reintroductions shall only occur when a species is determined to be indigenous to the area.

The following “management approach” was also added to section:

- Cooperating with State game management agencies as outlined in policies and guidelines for fish and wildlife management in wilderness.

Arizona Game and Fish Department Comment:

Wildlife in Wilderness Guideline:

Arizona Game and Fish Department Recommendation:

Language within this guideline should mirror the Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness (FS, BLM, and AFWA-June 2006).

Response: The guideline was modified as follows:

“Non-indigenous species should not be introduced into areas adjacent to wilderness areas when it is likely that individuals of that species will spread to wilderness areas during ordinary life processes.”

[2] Determination of whether a species is indigenous will be made in consultation and coordination with State game management agencies.

The following “management approach” was also added to section:

- Cooperating with State game management agencies as outlined in policies and guidelines for fish and wildlife management in wilderness.

Arizona Game and Fish Department Comment:

Land Ownership and Boundary Adjustment in Wilderness

Arizona Game and Fish Department Recommendation:

Standards - Add Standard: "Locatable Mineral exploration and extraction will be disallowed through withdrawal."

Response: Wilderness areas are withdrawal from mineral entry except where valid mineral entry rights existed prior to wilderness designation.

Arizona Game and Fish Department Comment and Recommendation:

On page 114, add this management approach: "Ensuring enforcement of restrictions on dogs in the bighorn sheep special management area within the Pusch Ridge Wilderness Area."

Response: Management approach added. “Supporting enforcement of restrictions on dogs, domestic sheep, and domestic goats in the Bighorn Sheep Special Management Area within the wilderness area.”

Arizona Game and Fish Department Comment:

Recommended Wilderness and Wilderness Study Areas - The Arizona Game and Fish Department has experienced restrictions resulting from Special Land Designations (specifically wilderness) including project delays, increased costs, increased man-hours, etc. This ultimately leads to decreased efficiency in protecting and managing Arizona's wildlife resources.

Language within the plan should recognize that, as habitats become more restricted and fragmented, proactively managing fish and wildlife is necessary and justifiable in these areas to maintain and enhance populations and biological diversity.

The Department supports a level of protection which maintains wildlife values, yet allows flexibility in management as a preferred strategy for the management of public lands. The Department, therefore, does not support designation of additional Wilderness areas.

Some activities that the Department would want allowed in any special designation for areas identified as having Wilderness values include:

- Hunting as regulated by the Department throughout the designated area, without special limitations
- Wildlife surveys, including motorized vehicle and equipment use when appropriate such as the use of planes and helicopters, helicopter landings in remote areas, and chainsaw use to clear deadfall from trails needed for management purposes.
- Wildlife management, including: introduction of native species; removal of undesirable species; use of planes and helicopters; helicopter landings in remote areas; use of motorized vehicles and equipment; capture, marking, collaring and radio-tracking of animals; development and maintenance of physical structures (e.g. bat gates or riparian exclosures)

- Wildlife water development and maintenance, including temporary motorized vehicle use, plane or helicopter use, and use of motorized equipment for specific projects.
- Stream renovation, including chemical removal of exotic fish and reintroduction of native fish, use of motorized vehicles and equipment, development and maintenance of physical structures to manage fish populations.
- Habitat management, including removal of exotic plants, timber or fuel wood removal, brush removal, prescribed fire, etc.

This section should refer to the Memorandum of Understanding between the USFS Southwest Regional Office and the Department, and to its attached *'Policies and Guidelines for Fish and Wildlife Management in National Forest and Bureau of Land Management Wilderness'* (June 2006).

Arizona Game and Fish Department Recommendation:

The Department recommends that an alternative be developed which uses alternate means than Wilderness to protect large areas of the Forest from the threat of single use development and that this alternative make judicious use of those means. The Department further recommends that the Forest thoroughly analyze the hindrance Wilderness might impose on managing for climate change.

Response: Alternatives were considered with varying amounts of wilderness recommendations. The hindrance of Wilderness designation on managing climate change is thoroughly analyzed through a range of alternatives with varying amounts of recommended wilderness.

The Plan does not suggest wilderness management that is not consistent with the cited MOU.

Arizona Game and Fish Department Comment:

Comments on Specific Wilderness Areas -

The Plan recommends two additions to the Wilderness system; The Ku Chish Wilderness Area (WA) at the north end of the 152 Chiricahua Mountains, and the Mt. Graham WA. Mt. Graham has been a Wilderness Study Area for 30 years and therefore managed as a defacto WA. The map for this WA in the Plan is difficult to decipher. Based on participation with the Forest on travel management planning (TMP), the Mt. Graham Wilderness Study Area has roads "cherry-stemmed" into the interior of the Study Area at Carter Canyon, Nuttall Canyon and Frye Mesa. The Department recommends these remain open, as well as extending the length of the road in Carter Canyon an additional 1.09 miles (converted to non-motorized use in the TMP process). Regarding the Ku Chish; there is one road decommissioned by TMP within the WA (4223), but the Department's understanding is that the road is out of service. Another road in Emigrant Canyon (255) needs to remain open and not be impacted by WA designation. Again, it is difficult to see how the proposed map interacts with these roads. An additional Management Approach added on page 129, stating that the Forest will collaborate with state and federal wildlife agencies to restore fish and wildlife populations, would enhance our efforts at Gould's turkey, native fish, and Chiricahua leopard frog reintroductions in these areas

Response: Safford RD travel management process is ongoing and would be the proper place to put forth these specific recommendations for roads.

Arizona Game and Fish Department Recommendation:

The Forest should amend the EIS to show the cherry stemmed areas on the map, which should include the additional 1.09 miles in Carter Canyon. The Road in Emigrant Canyon needs to remain open and the EIS should show this.

Response: The proper place to put forth these specific recommendations for roads is in the travel management process at the district level.

Arizona Game and Fish Department Recommendation:

The Forest should add an additional Management Approach on page 129 stating that the Forest will collaborate with state and federal wildlife agencies to restore fish and wildlife populations.

Response: The word “restore” was added to the following management approach under “Animals and Rare Plants” as a Forest-wide approach:

“Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor and restore wildlife, fish, and rare plant species occurring on National Forest System lands.”

Arizona Game and Fish Department Comment:

Desired Conditions in Wilderness and WSA's -

The Department is concerned that thriving wildlife and fish populations are not mentioned in the Desired Conditions section. The Department has experienced issues with other plans when wildlife and fish are not mentioned in the Wilderness section as this has been interpreted that those are not a high priority.

Arizona Game and Fish Department Recommendation:

Add the following to Desired Conditions:

1. Wildlife and Fish populations are healthy, robust, and thriving and do not show a trend toward decline or loss of diversity.

2. Wildlife populations are critically important components of naturalness (and, therefore, of wilderness character) in Arizona's wildernesses.

Response: Modified language in “Desired Conditions” as follows:

“Wilderness contributes to preserving the natural processes and habitats that sustain native species. Wildlife and fish populations in wilderness areas are thriving. Wilderness habitats are an important component of naturalness and are particularly valuable to threatened and endangered species, where the factors that threaten their existence are greatly minimized.”

Arizona Game and Fish Department Comment:

Wilderness Standards under Recommended Wilderness

Arizona Game and Fish Department Recommendation:

Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal."

Response: We do not have the authority to do this. Mineral withdrawals will be prioritized and applied for through our regular process. Existing claims in the proposed wilderness areas would be subject to valid existing rights. Also, the Forest Service does not have the final authority to ensure the withdrawal, therefore, the FS can only recommend withdrawal.

Arizona Game and Fish Department Recommendation:

Add Standard 3. "Ecological integrity, including maintenance and enhancement of native fish and wildlife values will be prioritized over aesthetic values."

Response: We don't think it's appropriate to prioritize any value over another.

Arizona Game and Fish Department Comment:

Wilderness and WSA Guidelines -

Again, Wildlife and Fish are missing from the Guidelines as high priority Wilderness values.

Arizona Game and Fish Department Recommendation:

Add Guideline: "Wilderness Study Areas, recommended Wilderness, and Designated Wilderness Areas will be managed to maintain and enhance wildlife and fish populations at optimal levels as a high priority Wilderness value."

Response: We recognize that wildlife is an important component and have modified the plan to reflect that status.

Arizona Game and Fish Department Comment:

Wild and Scenic River Desired Conditions -

Wild and Scenic rivers are extremely important native fish and aquatic wildlife habitat. Native fish and wildlife management must be recognized in the Forest Plan as a high priority resource need in any Wild and Scenic desired conditions to avoid situations where other resource needs and human aesthetics trump survival of imperiled fish and wildlife.

The Department fully supports the following: "Aquatic habitat is maintained in a condition with low substrate embeddedness, abundant aquatic food supply, and stable streambanks." However we recommend adding further clarification.

Arizona Game and Fish Department Recommendation:

Add the following to Desired Conditions:

"Where desired, native fish and wildlife populations are thriving without threat of competition from non-native competitors.

Response: Our current desired conditions adequately covers these points as well under the "Invasive Species" section.

Arizona Game and Fish Department Recommendation:

Aquatic habitat and desired fish assemblages are maintained using methods that may include fish surveys, non-native fish removal utilizing nets or battery or gas powered electrofishing equipment, construction and maintenance of fish barriers, and chemical renovations."

Response: Thank you for your comment. We already support these activities as identified in the management approach under "Animals and Rare Plants" as a Forest-wide approach:

"Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor and restore wildlife, fish, and rare plant species occurring on National Forest System lands."

Arizona Game and Fish Department Comment:

Wild and Scenic River Guidelines -

The Department is concerned that Wild and Scenic River designation may inhibit our ability to manage for native fish in the most effective and efficient manner.

Arizona Game and Fish Department Recommendation:

Add Guideline: "For all Wild and Scenic River designations, full consideration will be given to the potential impacts on the ability of the Forest and the Arizona Game and Fish Department to efficiently and effectively manage fish and wildlife resources to maintain and enhance fish and wildlife values associated with the rivers. Specific management actions to maintain and enhance fisheries values may include such activities as fish surveys, non-native fish removal utilizing nets or battery or gas powered electrofishing equipment, construction and maintenance of fish barriers, and chemical renovations."

Response: Thank you for your comment, we fully intend to work with Arizona Game and Fish Department as identified in the management approach under "Animals and Rare Plants" as a Forest-wide approach:

"Cooperating and collaborating with State and Federal wildlife management agencies and other partners to monitor and restore wildlife, fish, and rare plant species occurring on National Forest System lands."

Arizona Game and Fish Department Comment:

Wild and Scenic Rivers Standards

Arizona Game and Fish Department Recommendation:

Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal."

Response: In most locatable minerals operations, the Forest Service does not have the legal discretion to deny a proposal to explore for and remove the minerals. The approval of a withdrawal is at the discretion of the U.S. Department of the Interior, and the Forest Service may only make recommendations to them for mineral withdrawals.

Arizona Game and Fish Department Recommendation: Add Standard 3. "Ecological integrity, including maintenance and enhancement of native fish and wildlife values will be prioritized over aesthetic values."

Response: Desired condition states, “These rivers exist in a free-flowing condition with a range of flows that provide optimum conditions for native fish and wildlife and scenic quality.”

Wild and scenic river designation by Congress identifies “outstandingly remarkable values” for each individual river when designated.

Arizona Game and Fish Department Comment:

"Salable Minerals extraction will not be allowed."

Arizona Game and Fish Department Recommendation:

Certainly these areas warrant protection from mining exploration and mining for locatable minerals. The Department recommends the Forest amend the plan to withdraw all specially designated areas from mineral exploration and extraction.

Add Standard 2. "Locatable Mineral exploration and extraction will be disallowed through withdrawal."

Response: In most locatable minerals operations, the Forest Service does not have the legal discretion to deny a proposal to explore for and remove the minerals. That approval of a withdrawal is at the discretion of the U.S. Department of the Interior, and the Forest Service may only make recommendations for mineral withdrawals.

Arizona Game and Fish Department Comment:

The proposed designation of the Cave Creek Canyon Birds of Prey Zoological-Botanical Area and the extension of the Pole Bridge Research Natural Area (RNA) should not affect Department operations.

Arizona Game and Fish Department Recommendation:

The Department supports these designations.

Response: Thank you for your comment.

Arizona Game and Fish Department Comment:

Chiricahua EMA, Standard 2.a. states that a special use permit is required for any animal collection. This appears to usurp state authority contrary to State and Federal Law, the Department's MOU with the Forest, and contrary to the Wilderness Act as stated above. The Arizona Game and Fish Commission asserts sole authority to issue permits for collection and take for all state trust responsibility species, i.e. all wildlife species not expressly under the authority of the federal government.

Arizona Game and Fish Department Recommendation:

Strike "animal" from Standard 2.a.

Response: The Standard that is referenced applies only to the South Fork of Cave Creek Zoological Botanical Area (786 acres) and not to the Chiricahua EMA as a whole. Zoological Botanical Areas are areas that the Forest Service has designated to ensure protection of specific biological and zoological communities. They are designated for a special feature such as a rare plant or animal. As such, requiring a special use permit allows the Forest Service to track any plant or animal collections that may have a bearing on the special features of the area. This does not eliminate the requirement to obtain State permission for animal collections in these small research natural areas.

Arizona Game and Fish Department Comment:

Tumacacori EMA Standard 1.a. "A special use permit is required for any plant or animal collection"

This appears to usurp state authority contrary to State and Federal Law, the Department's MOU with the Forest, and contrary to the Wilderness Act as stated above. The Arizona Game and Fish Commission asserts sole authority to issue permits for collection and take for all state trust responsibility species, i.e. all wildlife species not expressly under the authority of the federal government.

Moreover, the purpose of this special designation area is not for the purpose of greater management of state responsibility wildlife species.

Arizona Game and Fish Department Recommendation:

Strike "animal" from Standard l .A.

Response: The Standard that is referenced applies only to the Wild Chile Botanical Area (2,836 acres) and not to the Tumacacori EMA as a whole. Botanical Areas are areas that the Forest Service has designated to ensure protection of specific biological communities. They are designated for a special feature such as a rare plant or animal. As such, requiring a special use permit allows the Forest Service to track any plant or animal collections that may have a bearing on the special features of the area. This does not eliminate the requirement to obtain State permission for animal collections in these small research natural areas.

Arizona Game and Fish Department Comment:

Goudy Canyon RNA

Arizona Game and Fish Department Recommendation:

Standard l. a. on page 155 regarding the Goudy Canyon RNA should indicate that prescribed fire to enhance wildlife habitat would be allowed. Bulleted statements 1, 6, and 7 under Management Approaches on page 156 are redundant.

Response: Text currently says:

1. Within the Goudy Canyon Research Natural Area:

    a. Wildlife habitat improvement, water yield improvement, and related improvement projects are prohibited.

In the establishment documentation it specifically states the prohibition of wildlife habitat improvement but does not prohibit prescribed fire for other purposes.

    b. Vegetation manipulation, including timber sale and harvest of forest products, will not be allowed except for approved research purposes.

Management approaches – the two redundant Management approaches were removed.

Arizona Game and Fish Department Comment:

Climate Conditions and Trends Consistency-Range Management -

In Chapter 5, Suitability, the second paragraph under Grazing Capability and Suitability on page 167 states that current climate conditions and trends are not outside of historical norms. This is completely contradictory to the beginning of Chapter 2 and Appendix A, which identifies climate change as a major concern within the plan and identifies a potential decrease in forage and water for livestock (pg. 18). It then goes on to state that forage productivity is not currently mapped at a fine scale and not used in range capability determinations.

Response: The suitability/capability analysis is based on current conditions that are determined to be within historical ranges. Long-term climate effects are difficult to quantify.

Arizona Game and Fish Department Recommendation:

The Department recommends revising Chapter 5 and adding mapping of forage productivity to aid in management as a Desired Condition within the Range Management section on page 88.

Response: This level of detail is more appropriately covered under site-specific analysis for individual allotments during review of allotment management. The Forest is in the process of mapping productivity based on soil units but the analysis is not complete.

Arizona Game and Fish Department Comment:

Natural Water Sources -

In the Monitoring section on page 179, under Natural Water Sources, the Monitoring Question posed is how many springs have been developed for species recovery? This seems contrary to the Natural Water Sources Objectives on page 57 that identify reconstructing only developed springs, and the Guideline on page 58 to protect natural springs and seeps.

Arizona Game and Fish Department Recommendation:

This Monitoring Question should be restated as, "How many stream restoration/development projects and spring reconstructions have been completed for the recovery of species of conservation concern?"

Response: Current wording: “How many stream or spring restoration projects have been completed for the benefit of species of conservation concern?” Removed “how many springs have been developed for species recovery.”

Arizona Game and Fish Department Comment:

The second paragraph on page 204 lists the Aspen fire of 2003 as the largest on record in the Coronado National Forest. That is no longer accurate as the Horseshoe 2 fire was nearly three times that size.

Arizona Game and Fish Department Recommendation:

The plan should be reviewed for errors, consistency, and accuracy by multiple disciplines before finalization.

Response: Replaced text: “In June 2003, for example, the 84,750-acre, human-caused Aspen Fire on the Coronado National Forest (one of the largest on record) occurred during one of the warmest years on record with one of the latest monsoons.

Appendix K – Other Supporting Documents

This list is of documents that support development of the draft environmental impact statement and draft revised land and resource management plan and can be found on the Coronado National Forest public website: https://www.fs.usda.gov/detail/coronado/landmanagement/planning/?cid=fswdev7_018702.

- Social and Economic Sustainability Report
- Ecological Sustainability Report
- Comprehensive Evaluation Report (CER)
- CER Supplementary Document (Analysis of Management Situation)
- Population Viability Assessment
- Economic Analysis for the DEIS
- Potential Wilderness Area Reports
- Eligible Wild and Scenic River Reviews
- Central Arizona Grotto. 2013. Coronado National Forest Cave and Karst Management Guide https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd540162.pdf

Appendix L – Maps of Ecosystem Management Areas for Each Alternative

Part 1 – No Action Alternative Maps (1986 Forest Plan)

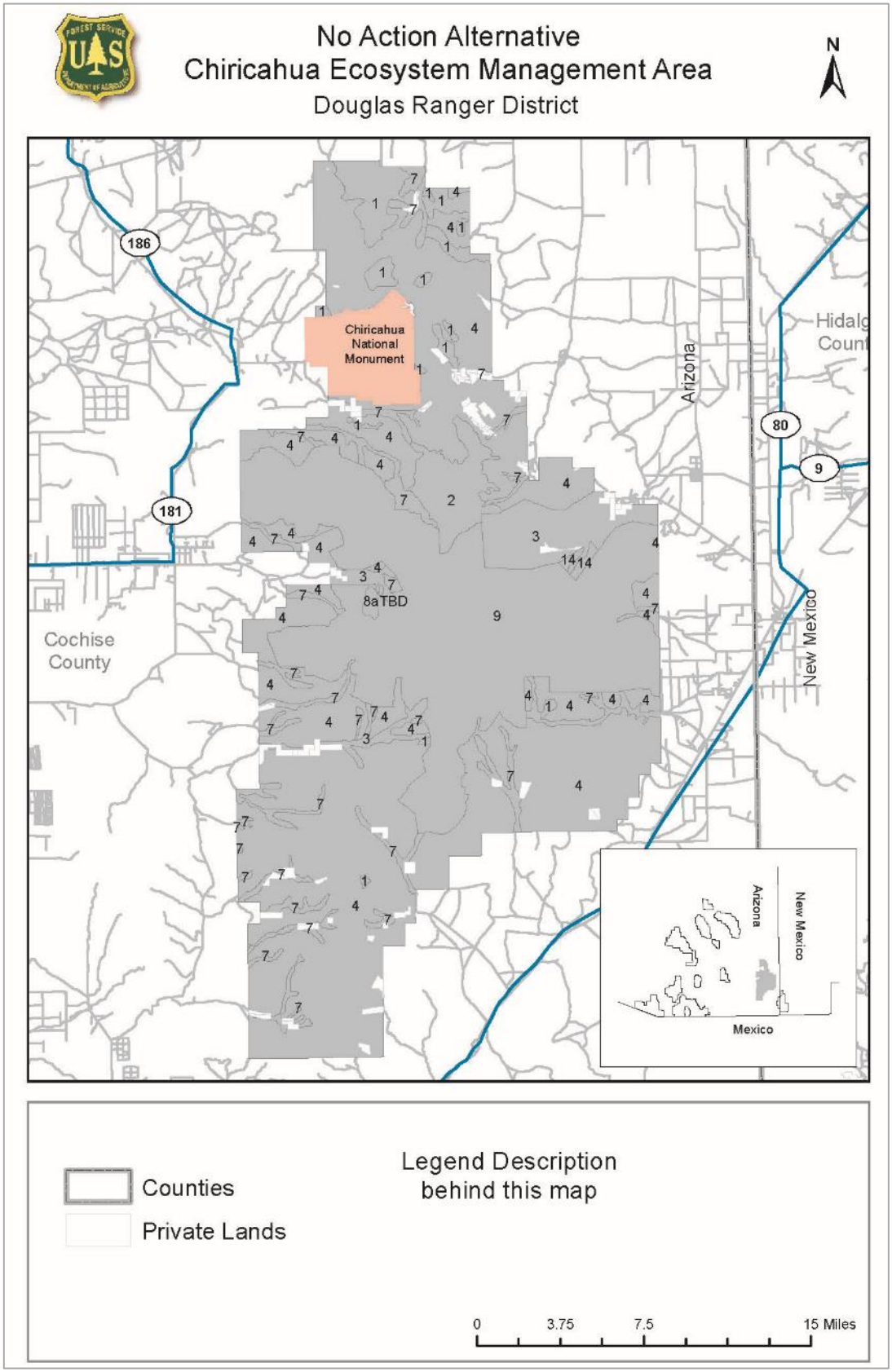

Figure 12. Management area allocations within the Chiricahua Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

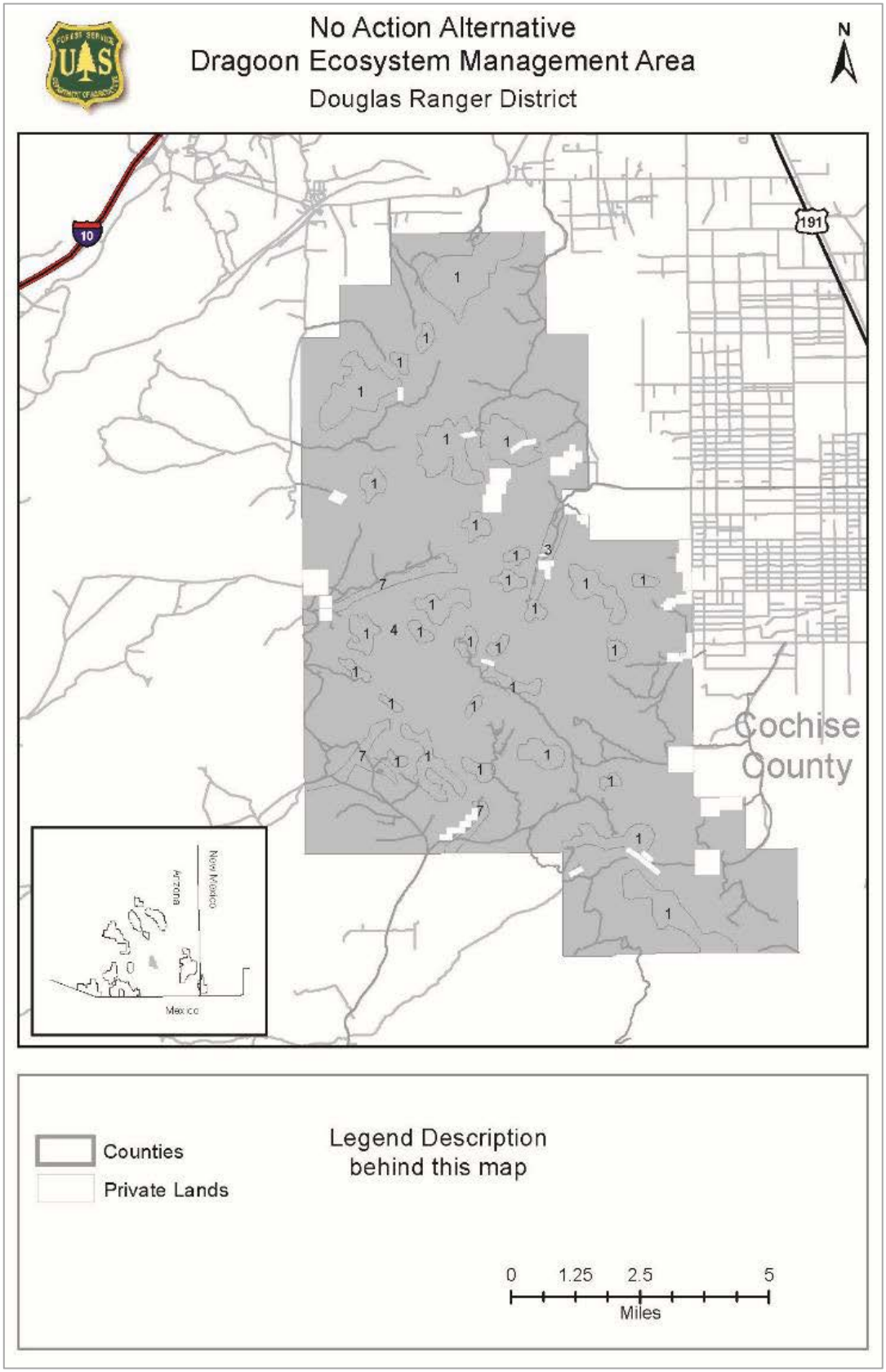

Figure 13. Management area allocations within the Dragoon Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

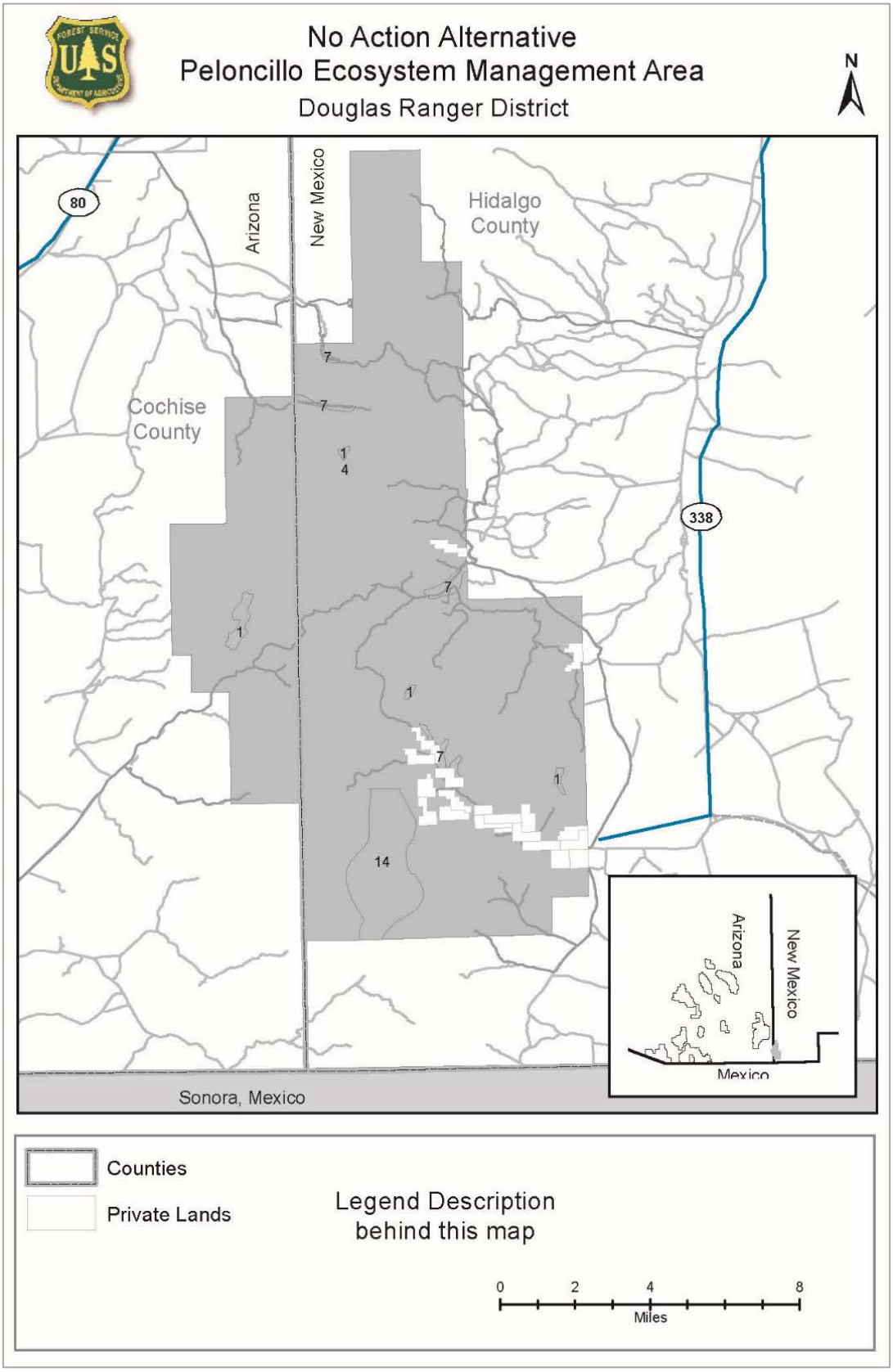

Figure 14. Management area allocations within the Peloncillo Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

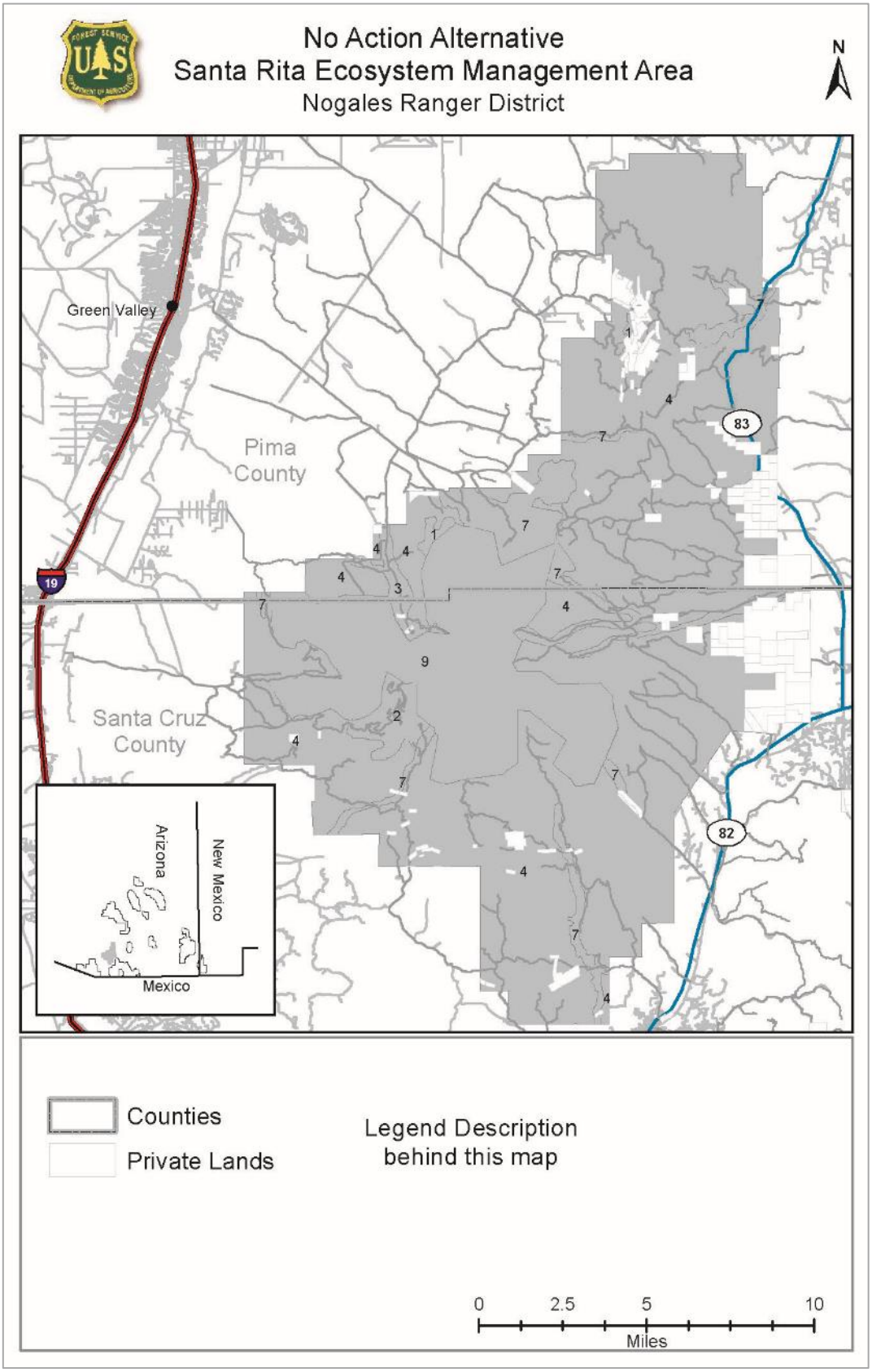

Figure 15. Management area allocations within the Santa Rita Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

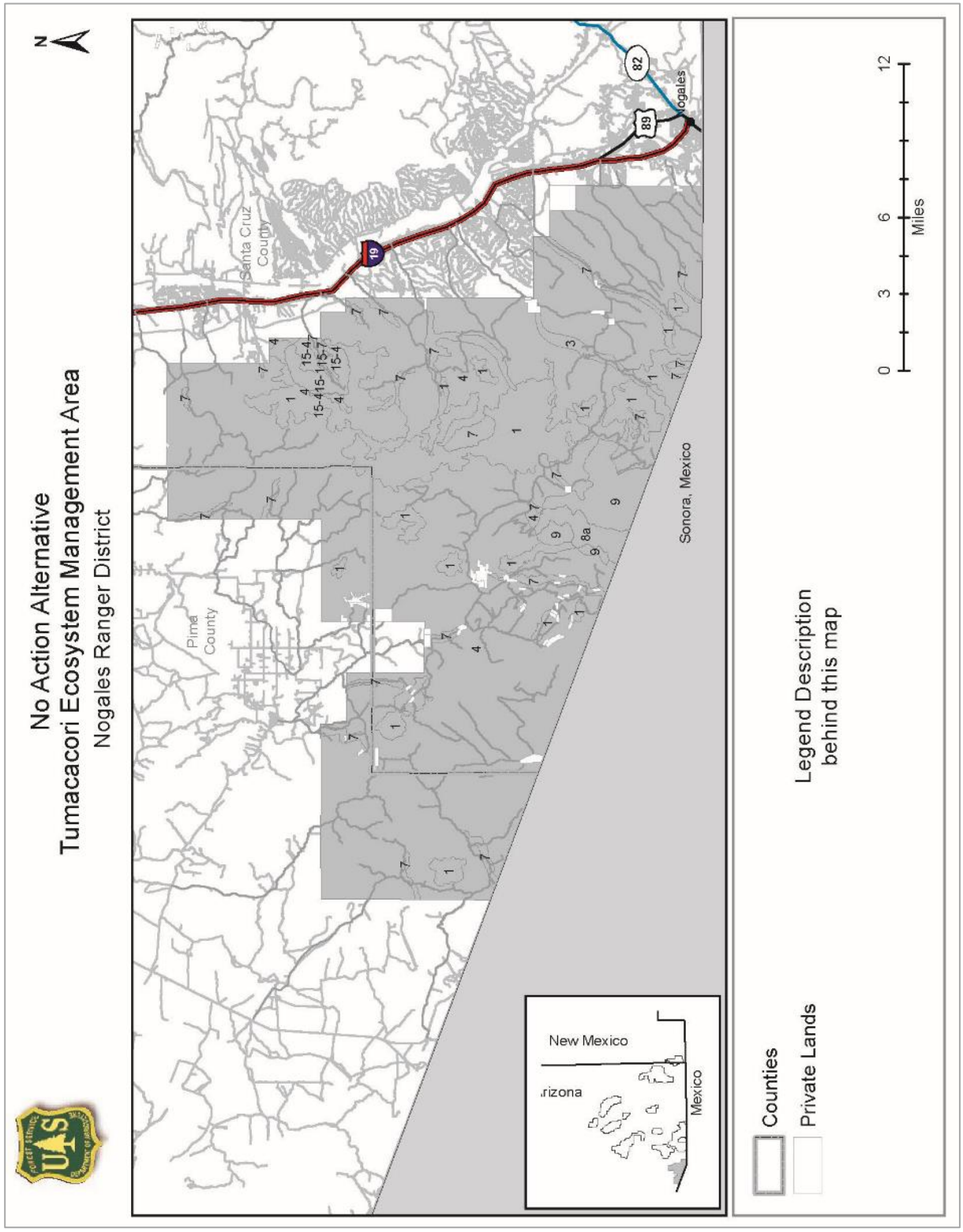

Figure 16. Management area allocations within the Tumacacori Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

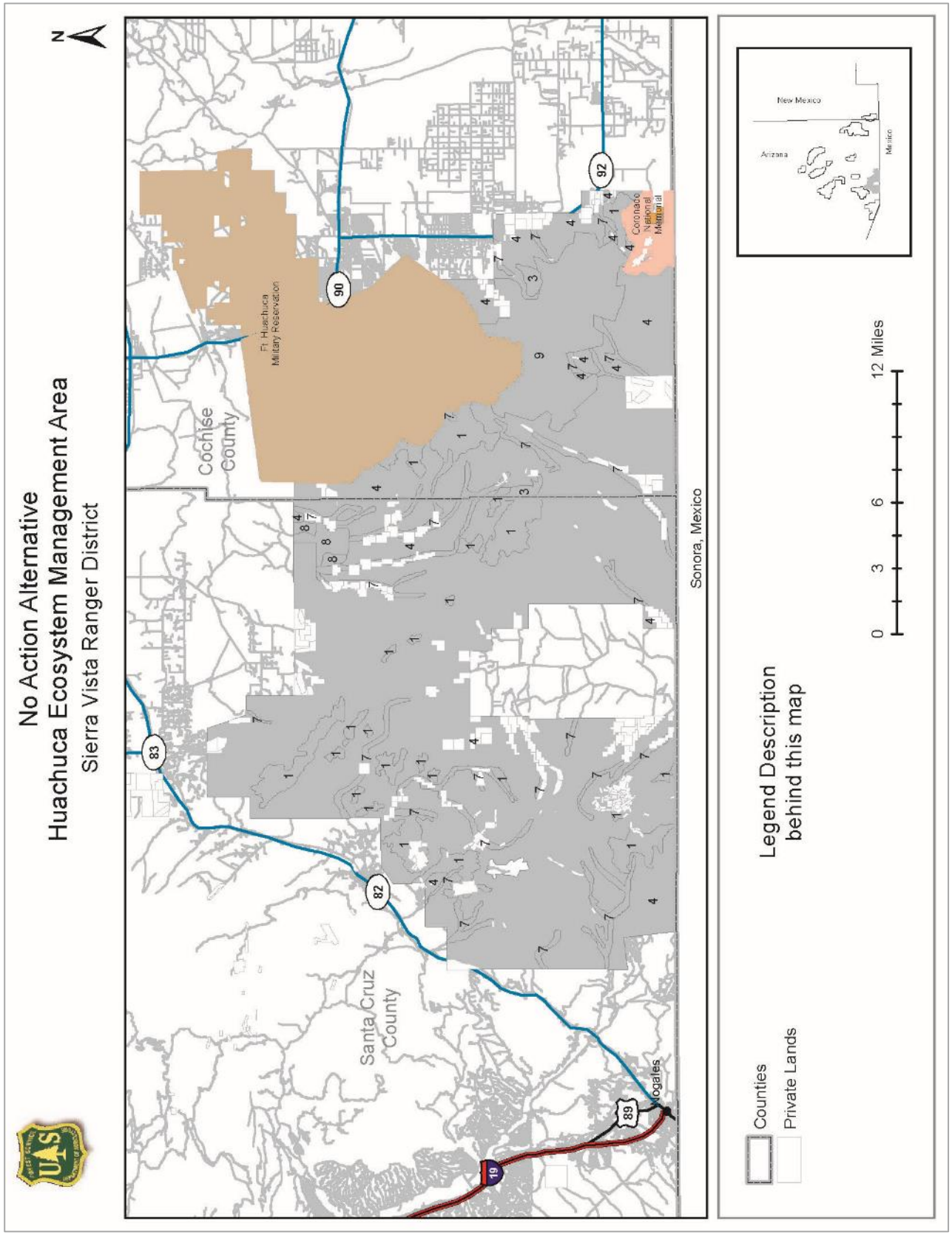

Figure 17. Management area allocations within the Huachuca Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

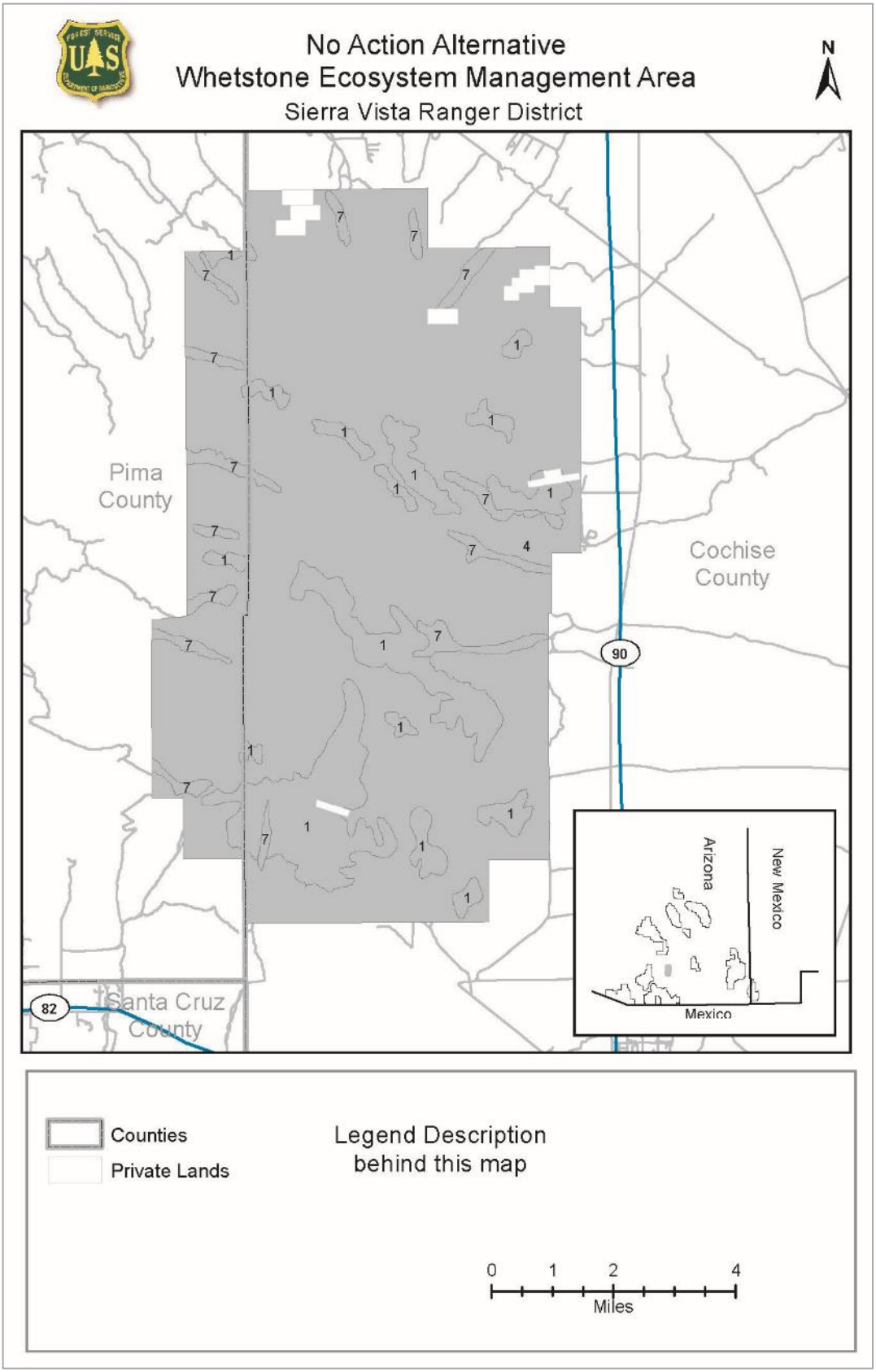

Figure 18. Management area allocations within the Whetstone Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

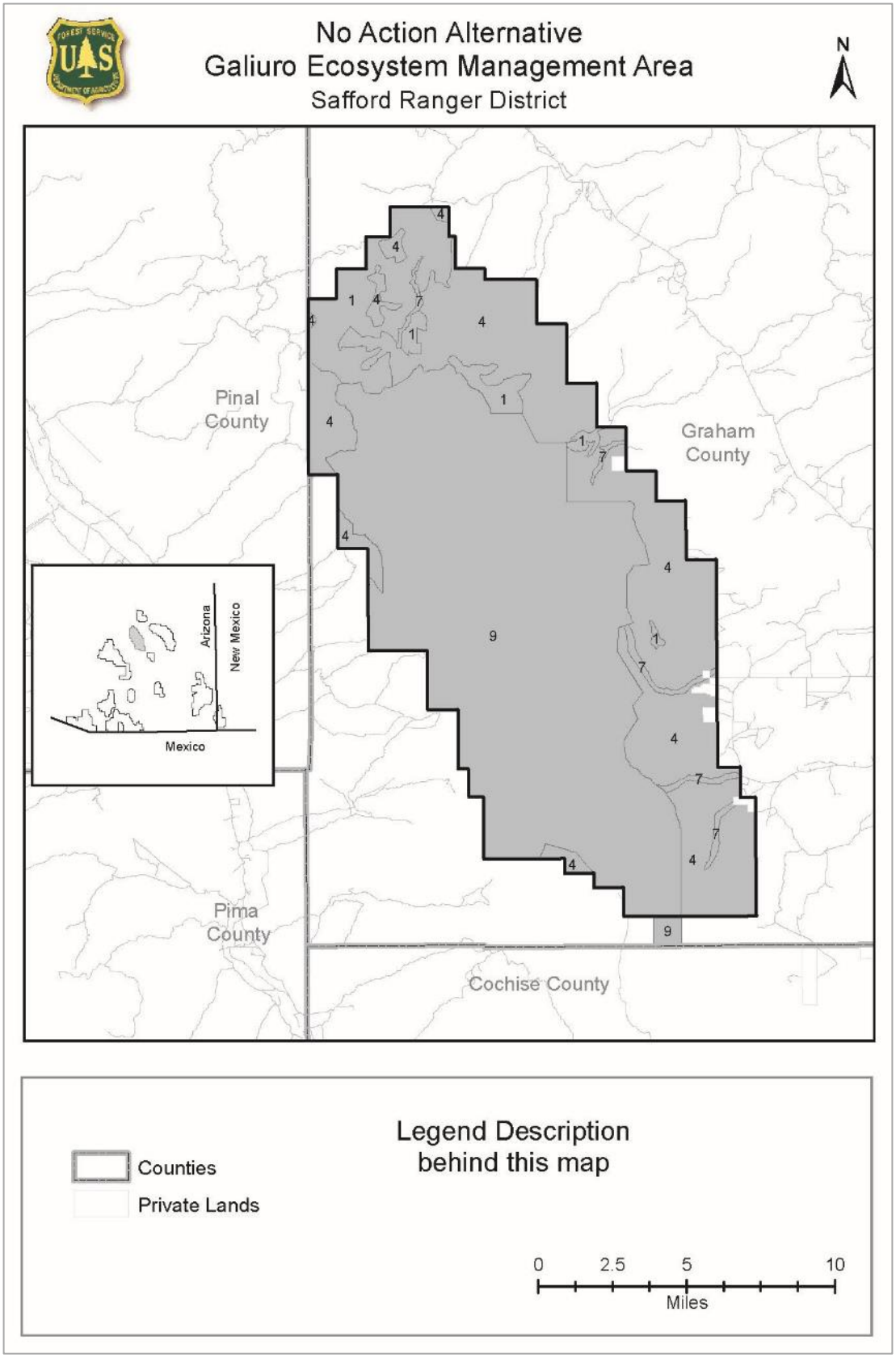

Figure 19. Management area allocations within the Galiuro Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

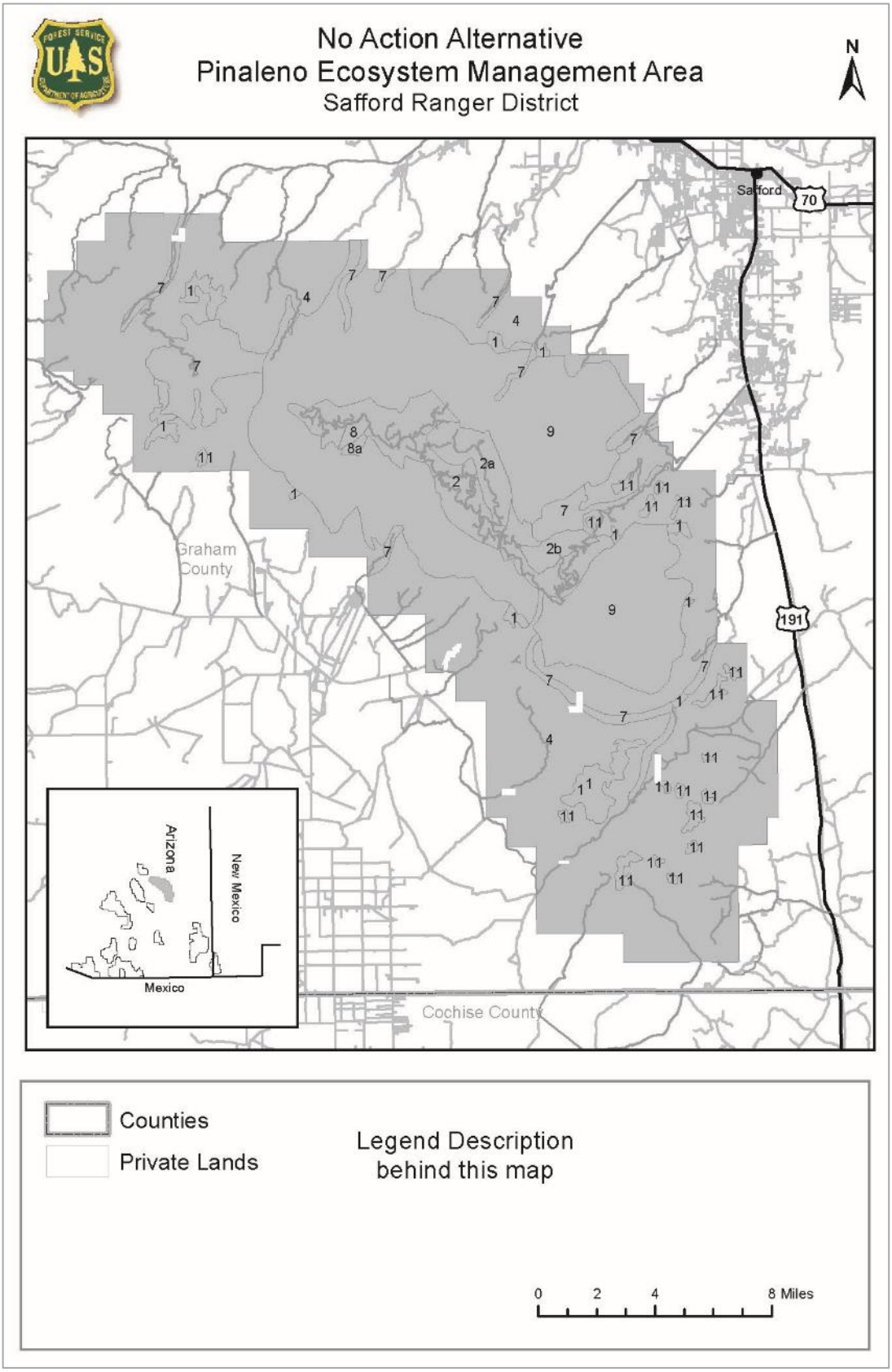

Figure 20. Management area allocations within the Pinaleño Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

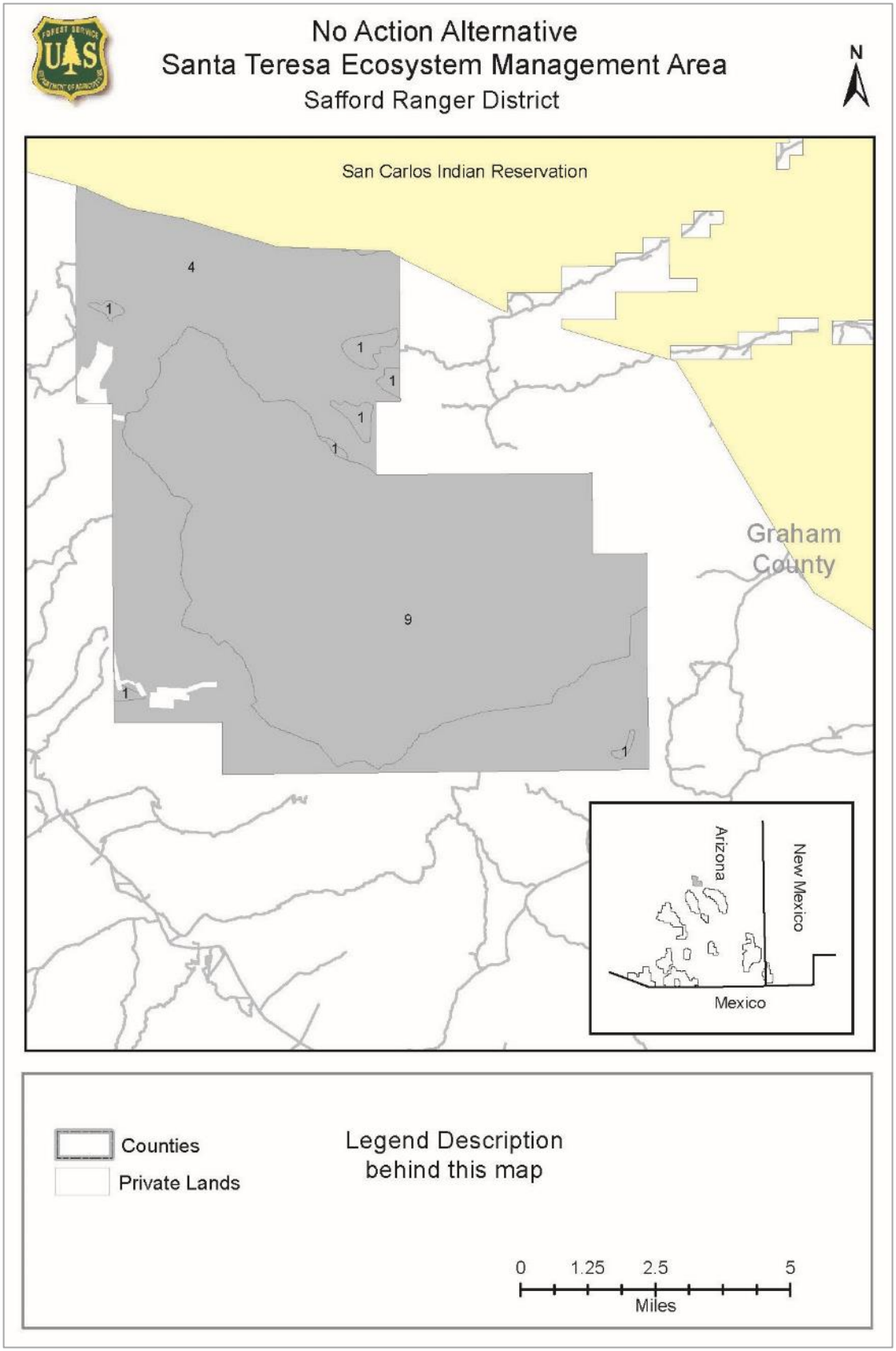

Figure 21. Management area allocations within the Santa Teresa Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

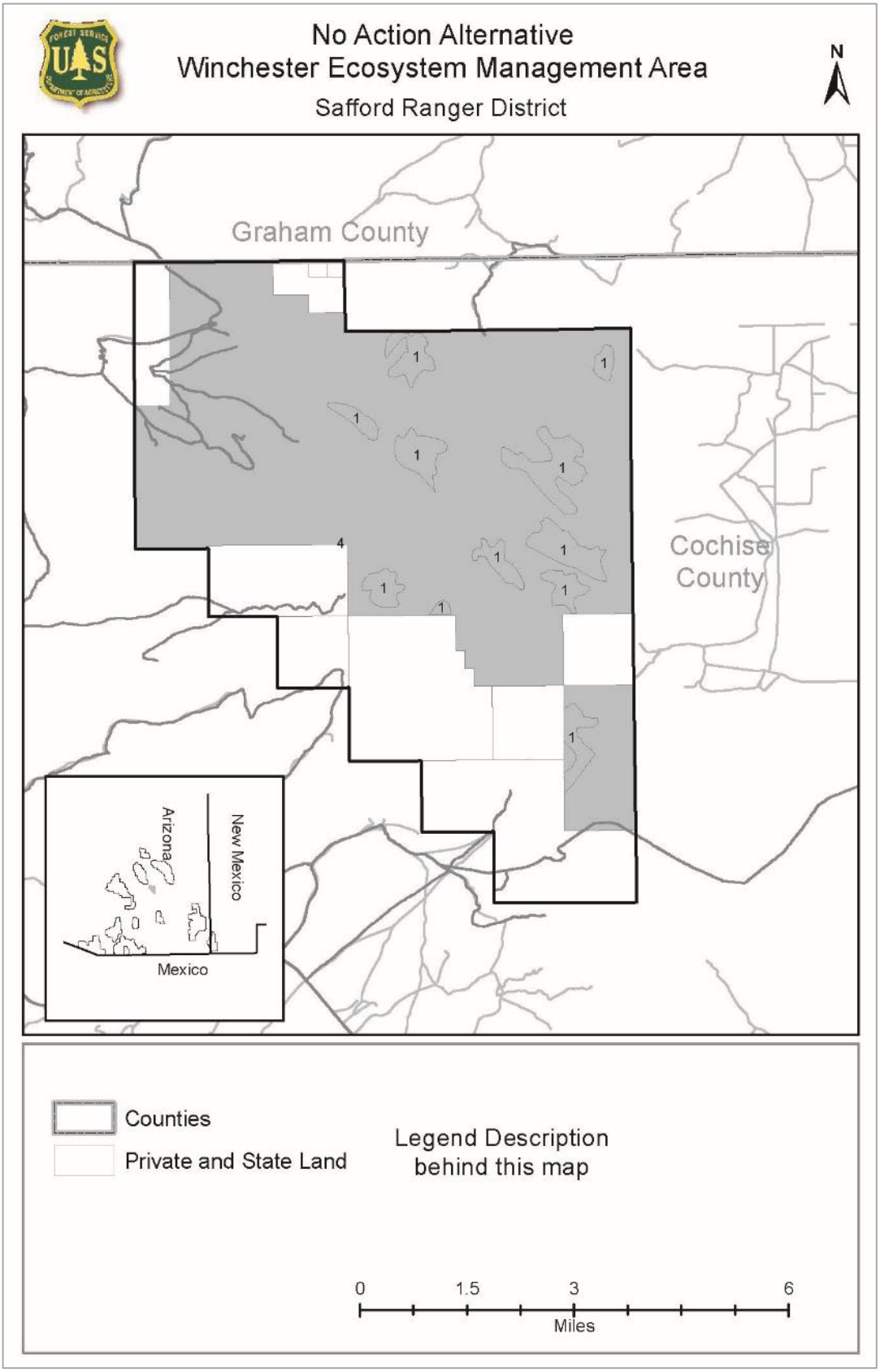

Figure 22. Management area allocations within the Winchester Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

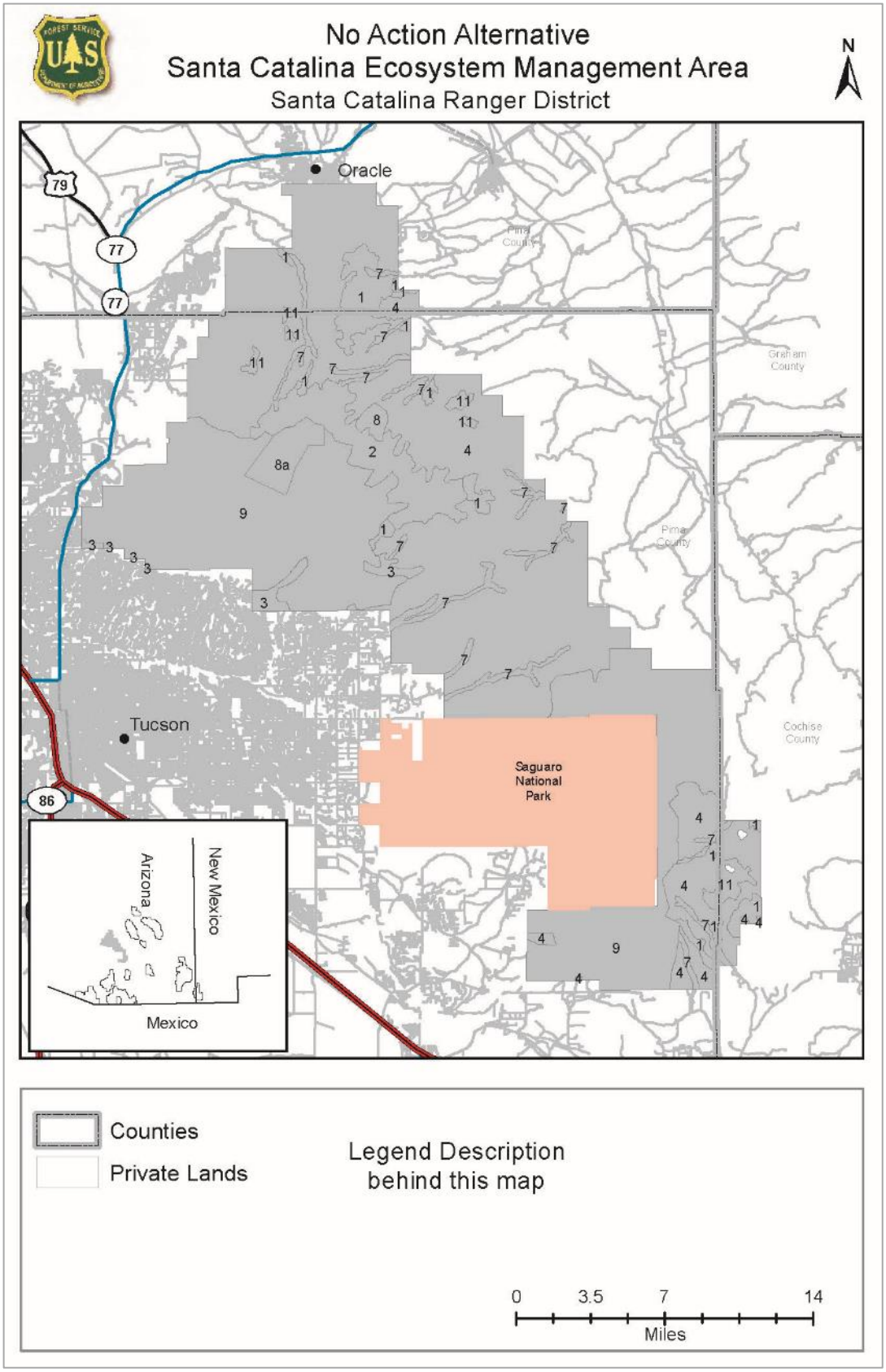

Figure 23. Management area allocations within the Santa Catalina Ecosystem Management Area as designated by the 1986 forest plan (no action alternative)

Key of Management Area Definitions

Management Area Code	Definition
1	Visual Resources/Semiprimitive Dispersed Recreation
2	Dispersed Recreation/Timber Harvest
2a	Dispersed Recreation/Timber Harvest (Proposed Astrophysical Area)
2b	Dispersed Recreation/Timber Harvest
3	Dispersed Recreation
4	Livestock Grazing/Game Habitat/Fuelwood Harvest
7	Unique Resources (Including Riparian Areas)
8	Research Natural Area
8a	Research Natural Area/Wilderness
9	Wilderness
14	Zoological-Botanical Area
15-1	Wild Chile Botanical Area-Visual Resources/Semi-Primitive Dispersed Recreation
15-4	Wild Chile Botanical Area-Livestock Grazing/Game Habitat/Fuelwood Harvest
15-7	Wild Chile Botanical Area-Unique Resources (Including Riparian Areas)
TBD	To Be Determined

Part 2 - Proposed Action Maps (Revised Draft Forest Plan)

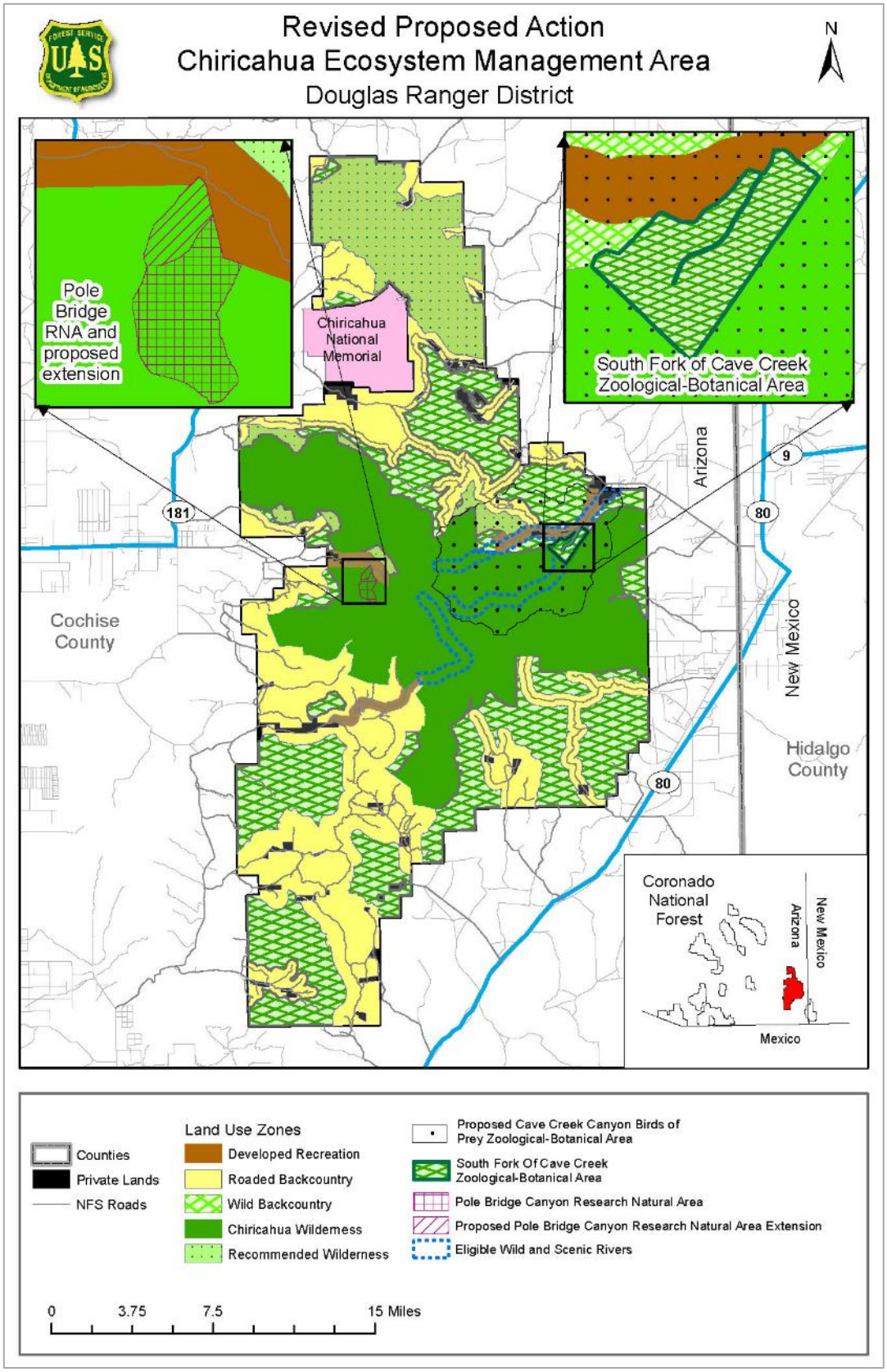

Figure 24. Land use zones and special areas in the Chiricahua Ecosystem Management Area as proposed by the draft revised forest plan

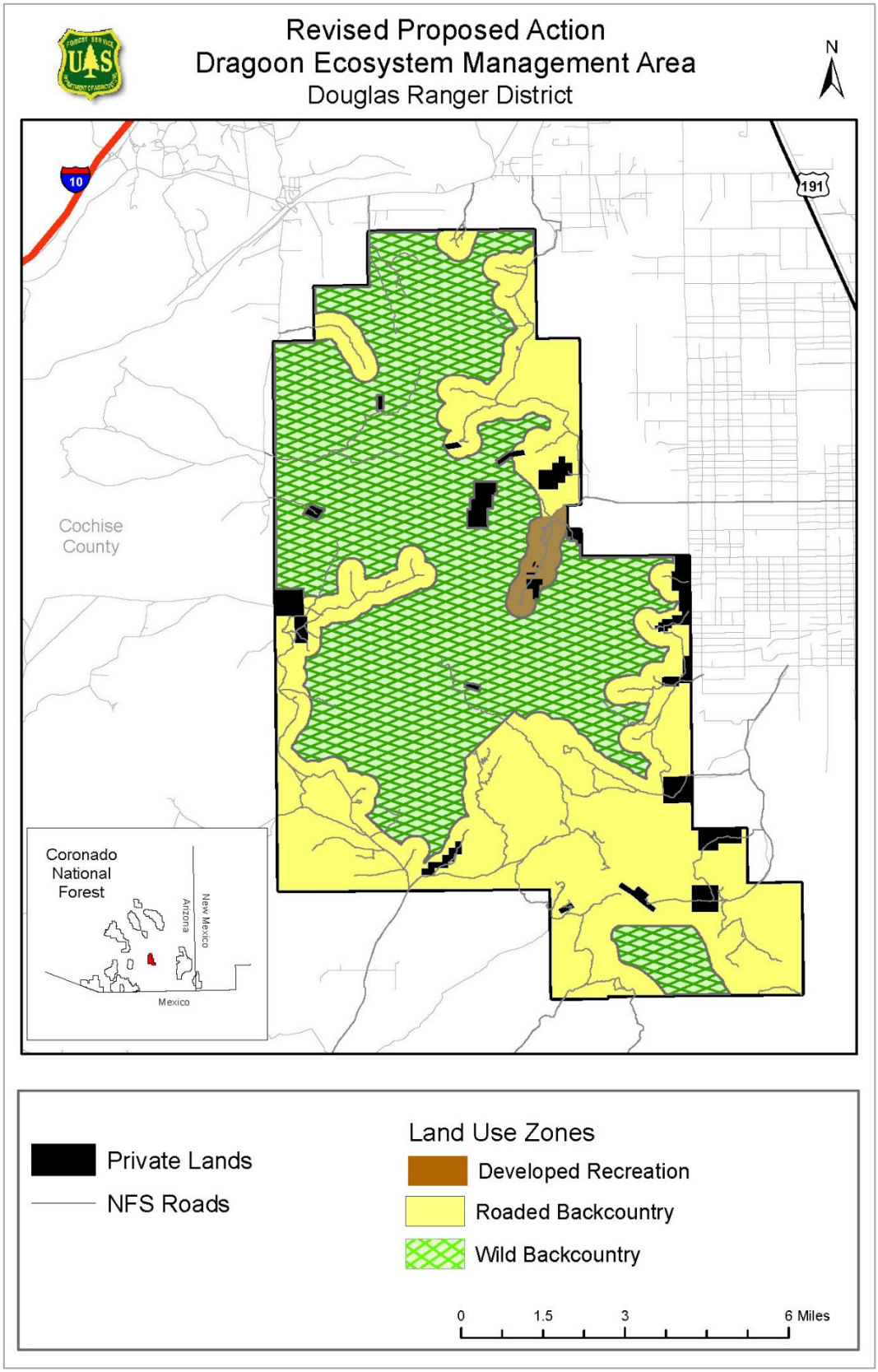

Figure 25. Land use zones and special areas in the Dragoon Ecosystem Management Area as proposed by the draft revised forest plan

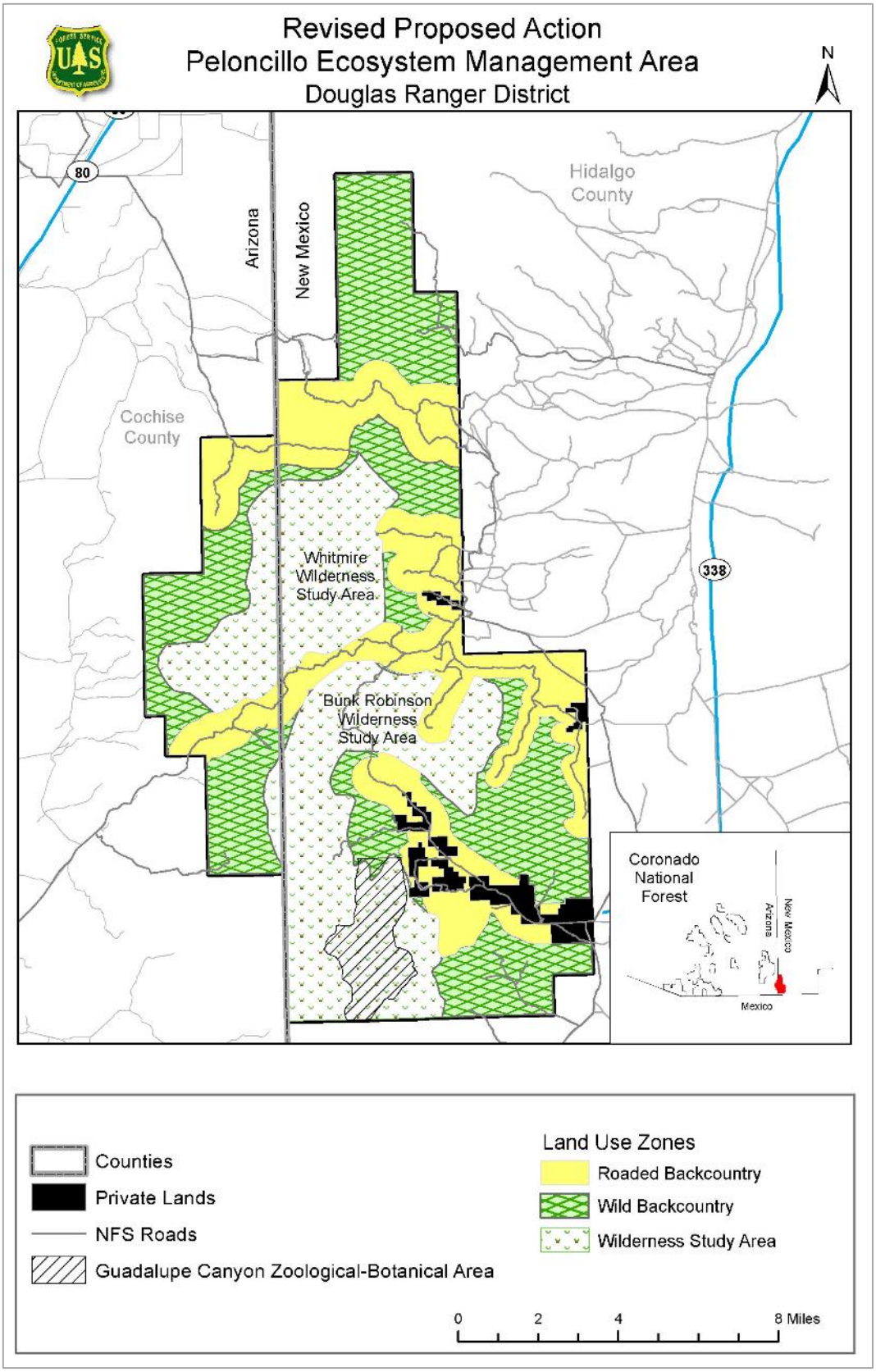

Figure 26. Land use zones and special areas in the Peloncillo Ecosystem Management Area as proposed by the draft revised forest plan

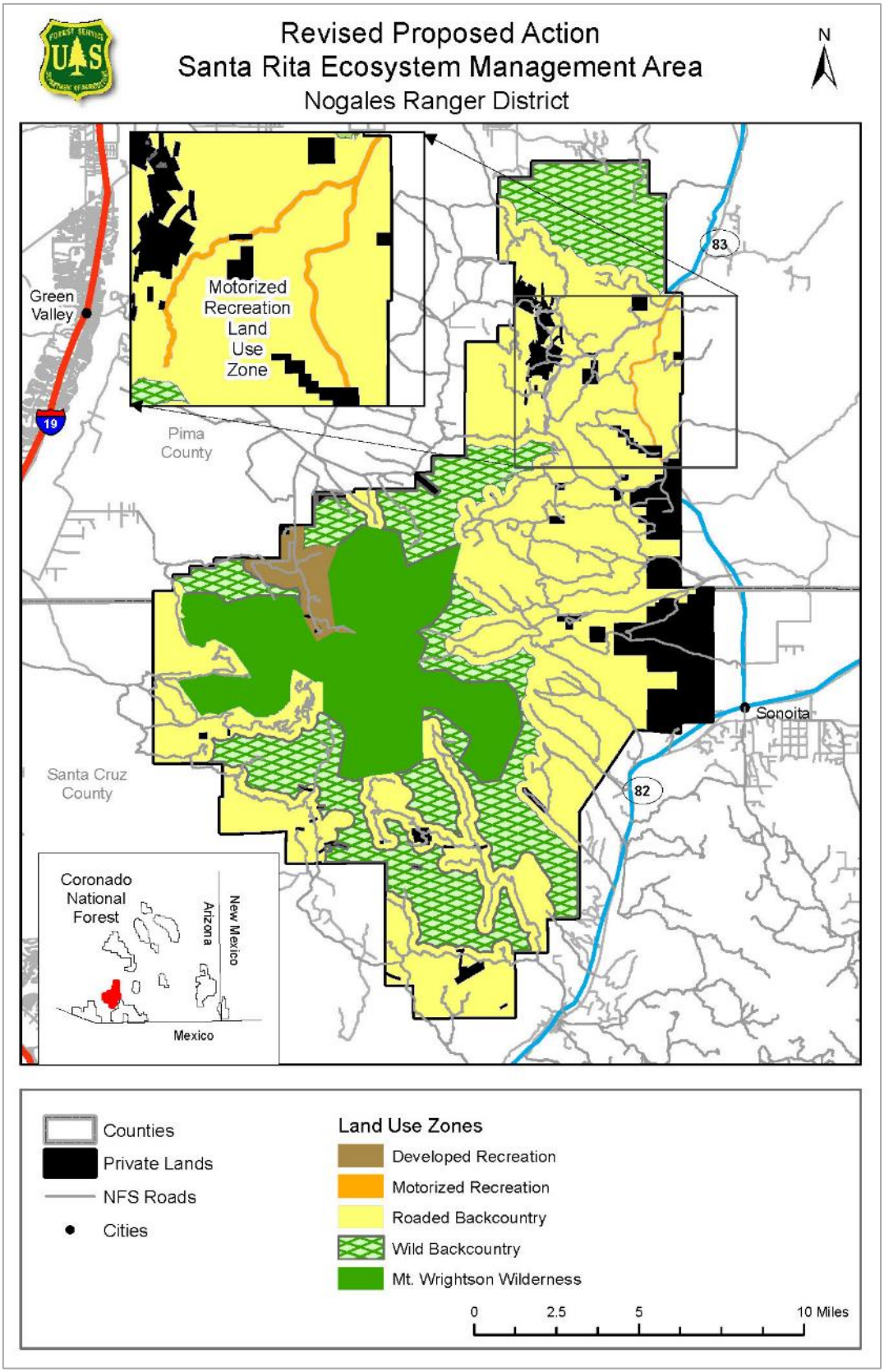

Figure 27. Land use zones and special areas in the Santa Rita Ecosystem Management Area as proposed by the draft revised forest plan

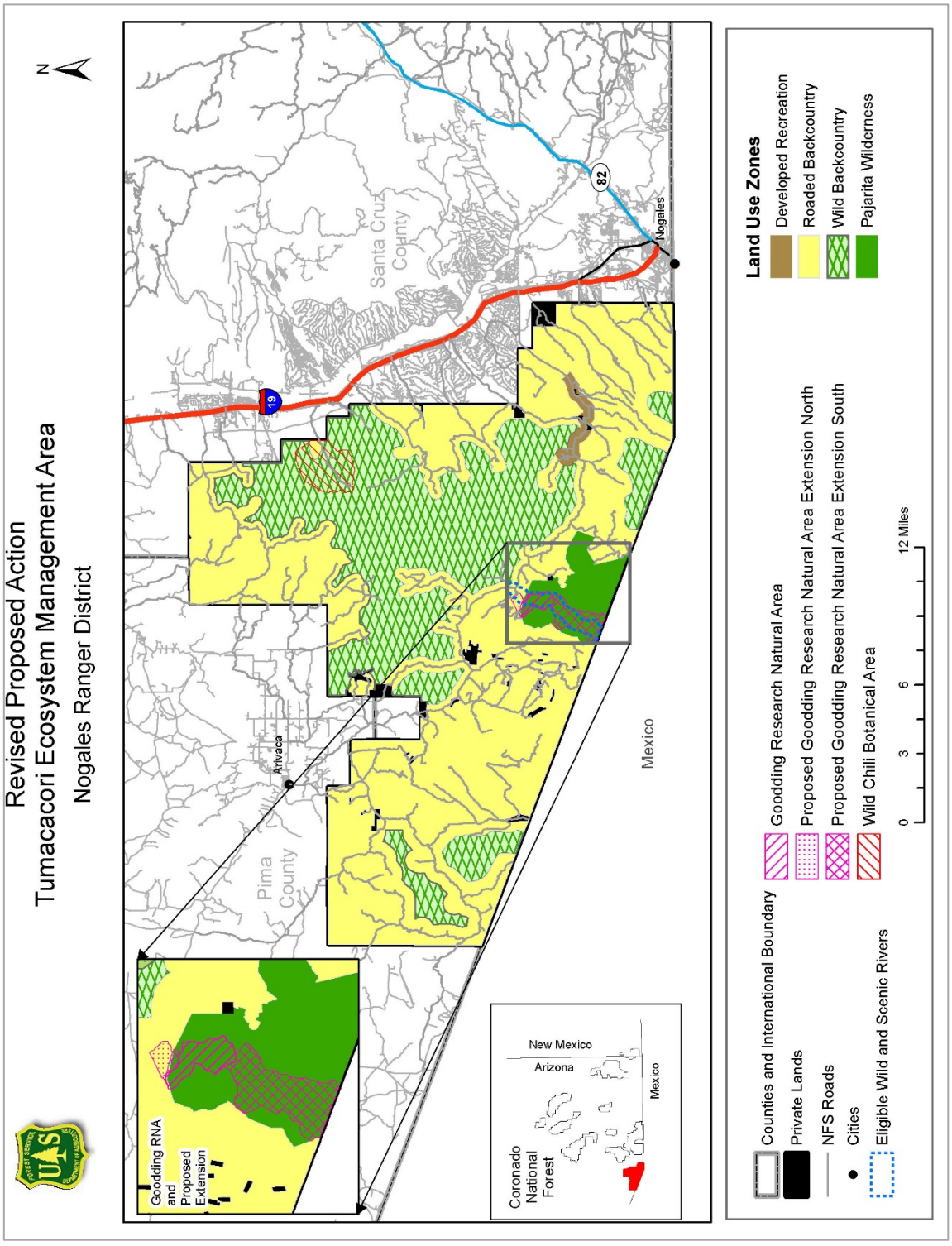

Figure 28. Land use zones and special areas in the Tumacacori Ecosystem Management Area as proposed by the draft revised forest plan

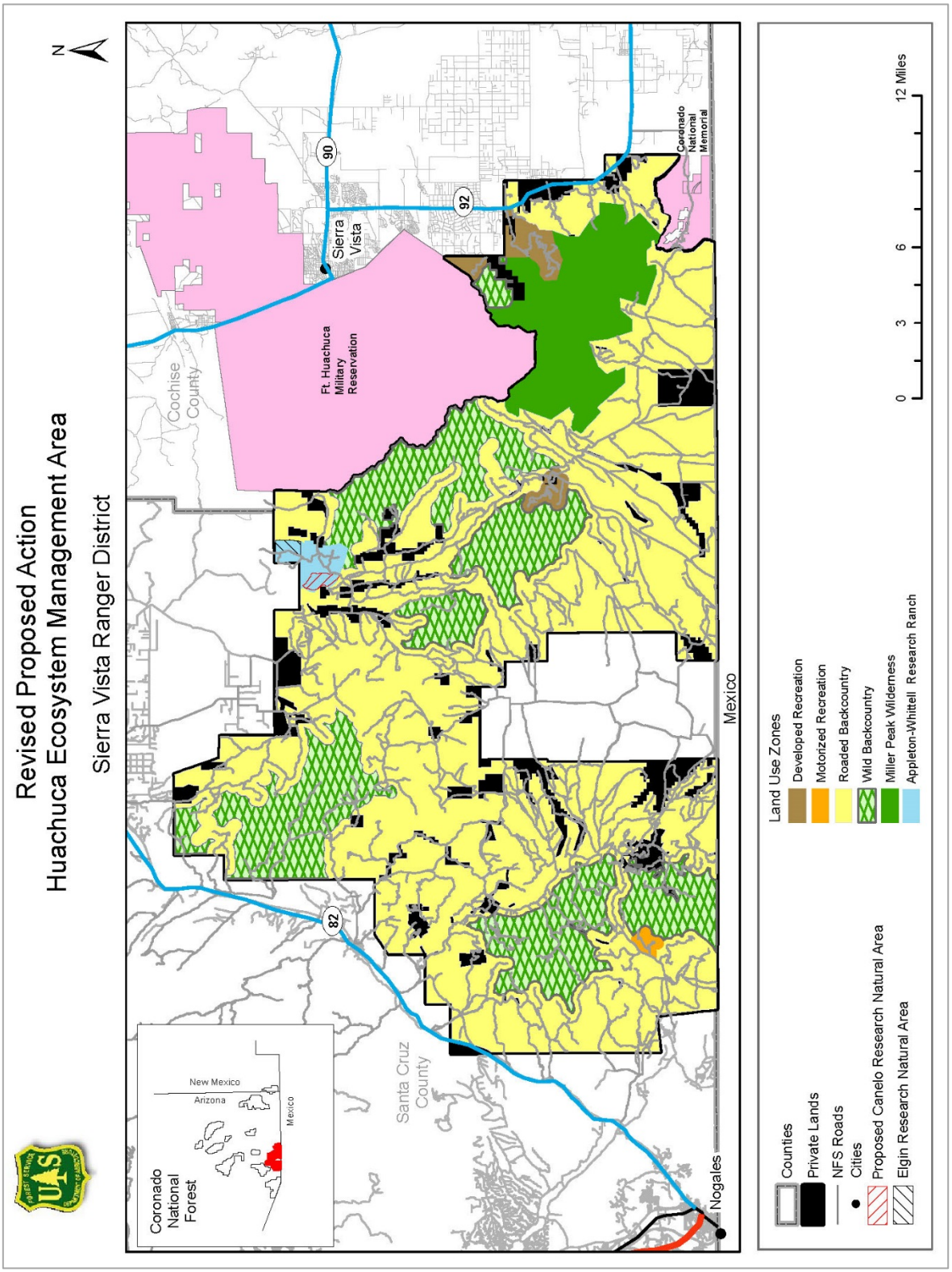

Figure 29. Land use zones and special areas in the Huachuca Ecosystem Management Area as proposed by the draft revised forest plan

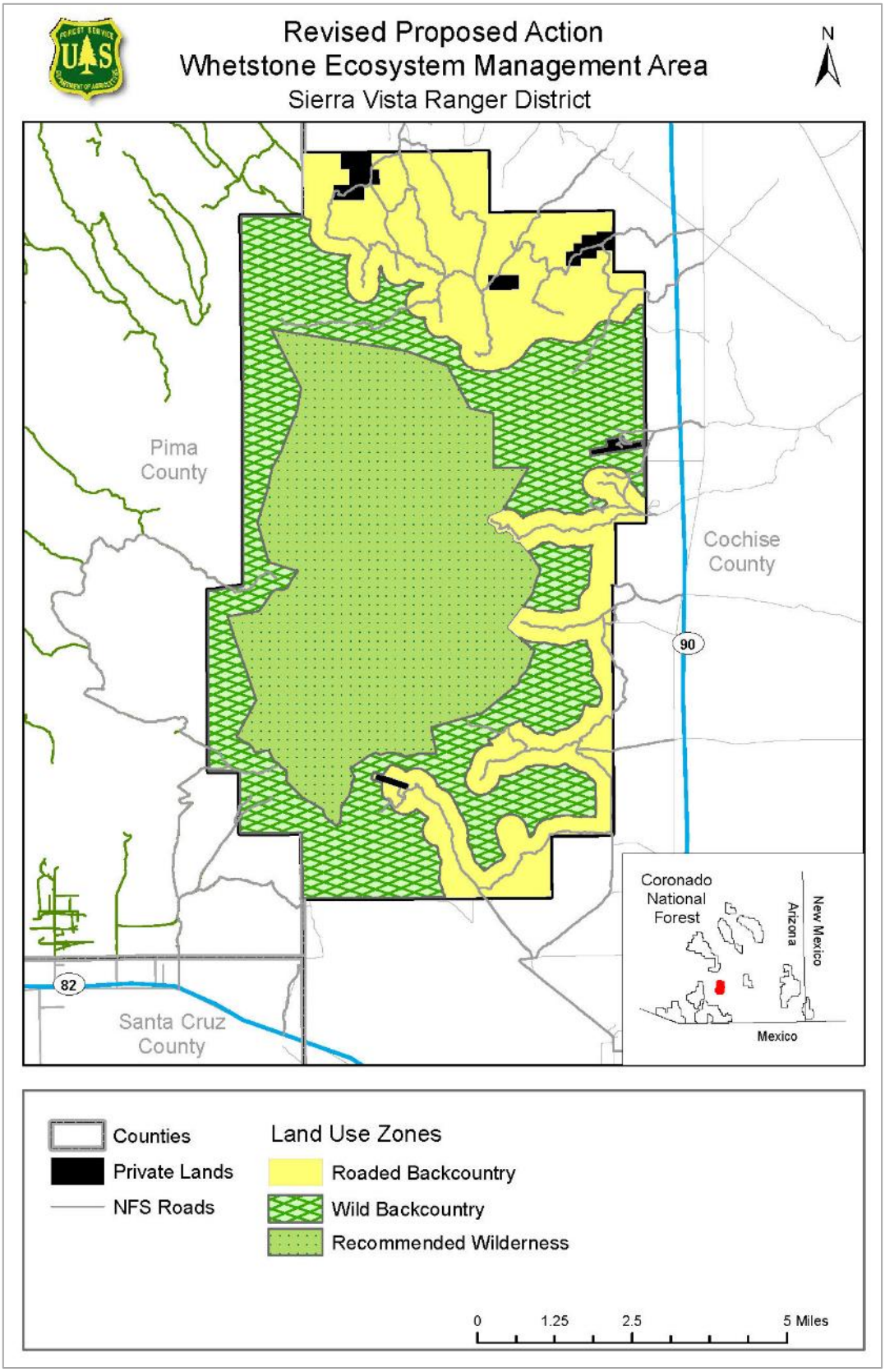

Figure 30. Land use zones and special areas in the Whetstone Ecosystem Management Area as proposed by the draft revised forest plan

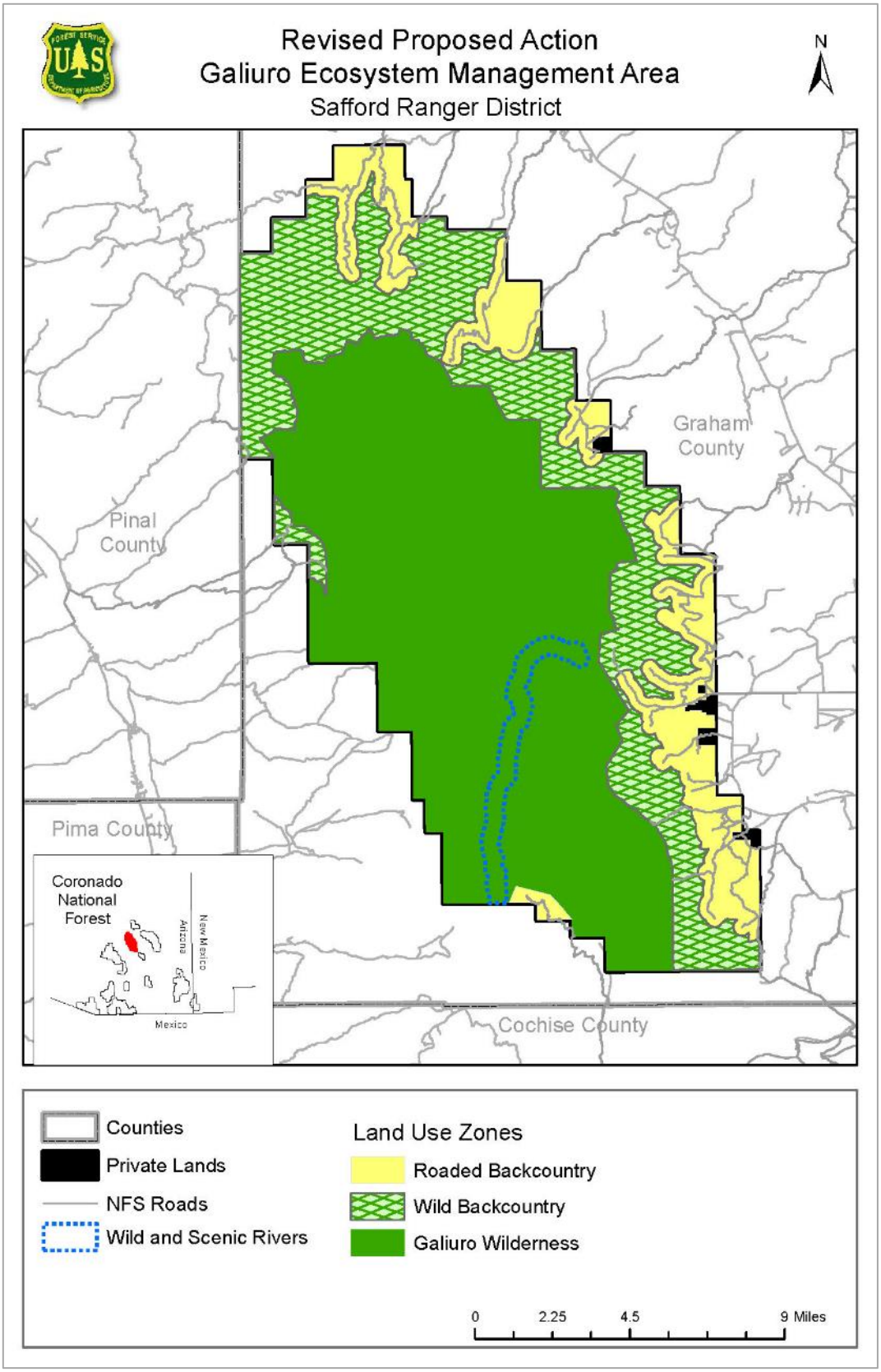

Figure 31. Land use zones and special areas in the Galiuro Ecosystem Management Area as proposed by the draft revised forest plan

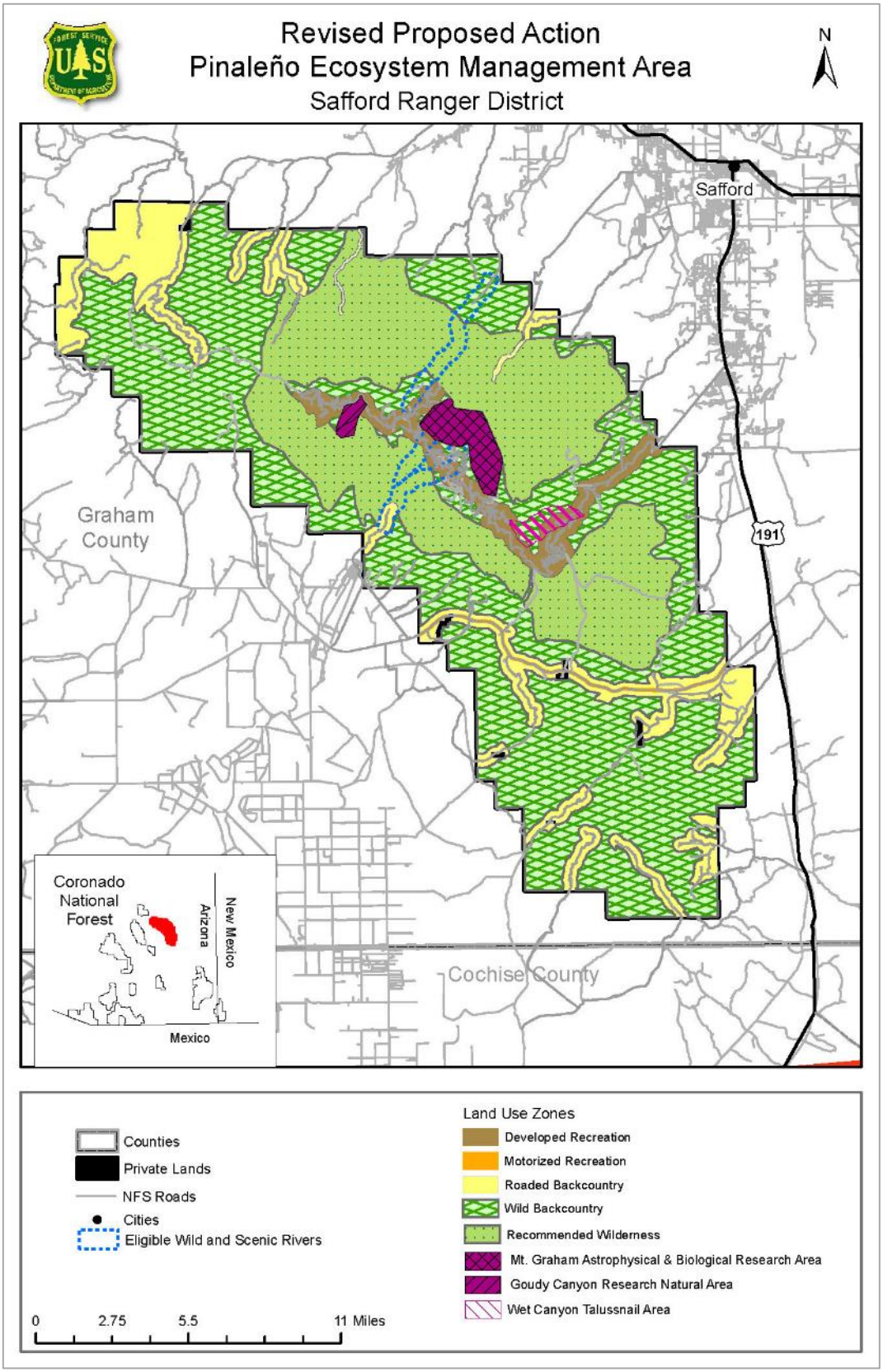

Figure 32. Land use zones and special areas in the Pinaleño Ecosystem Management Area as proposed by the draft revised forest plan

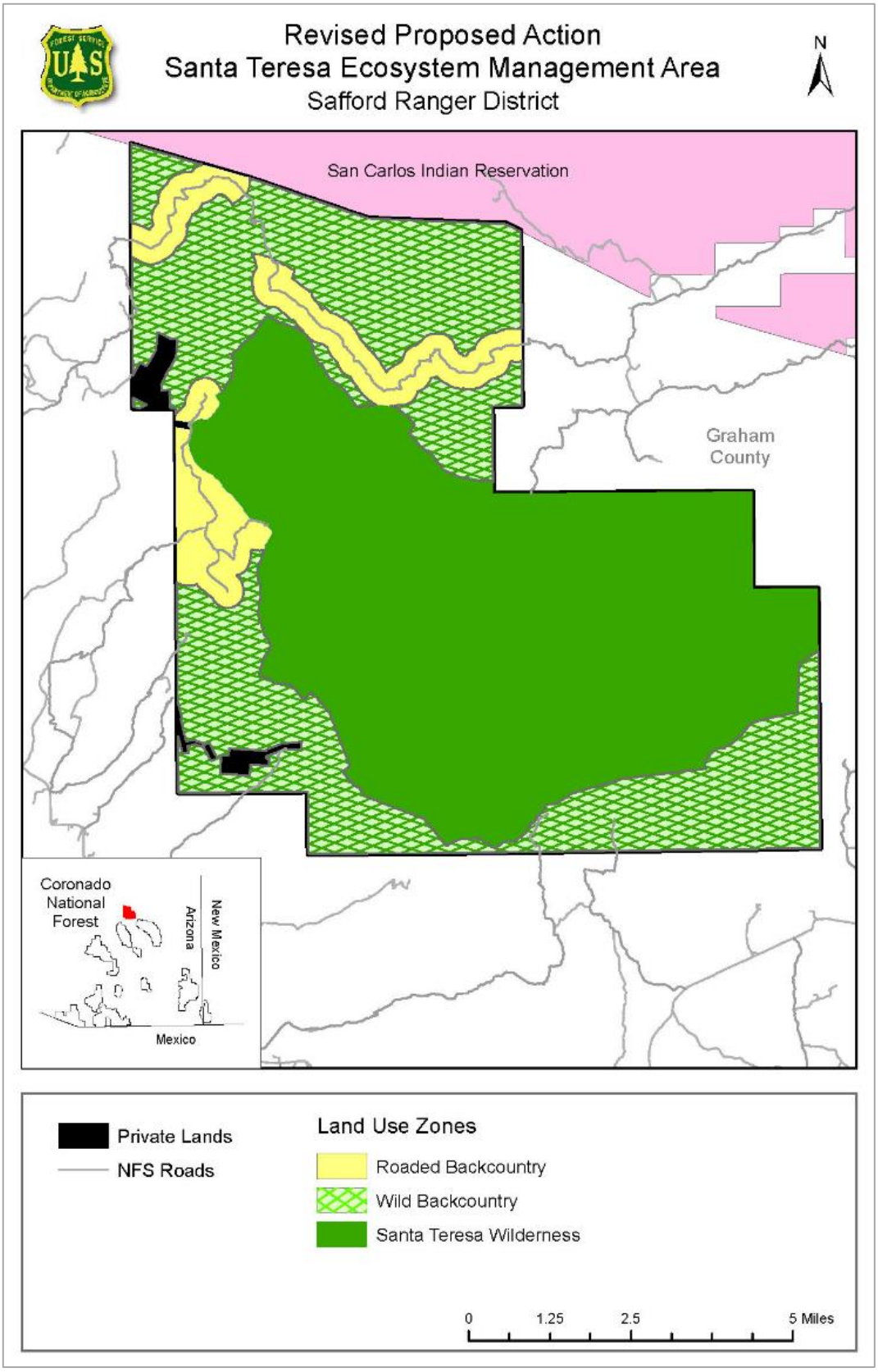

Figure 33. Land use zones and special areas in the Santa Teresa Ecosystem Management Area as proposed by the draft revised forest plan

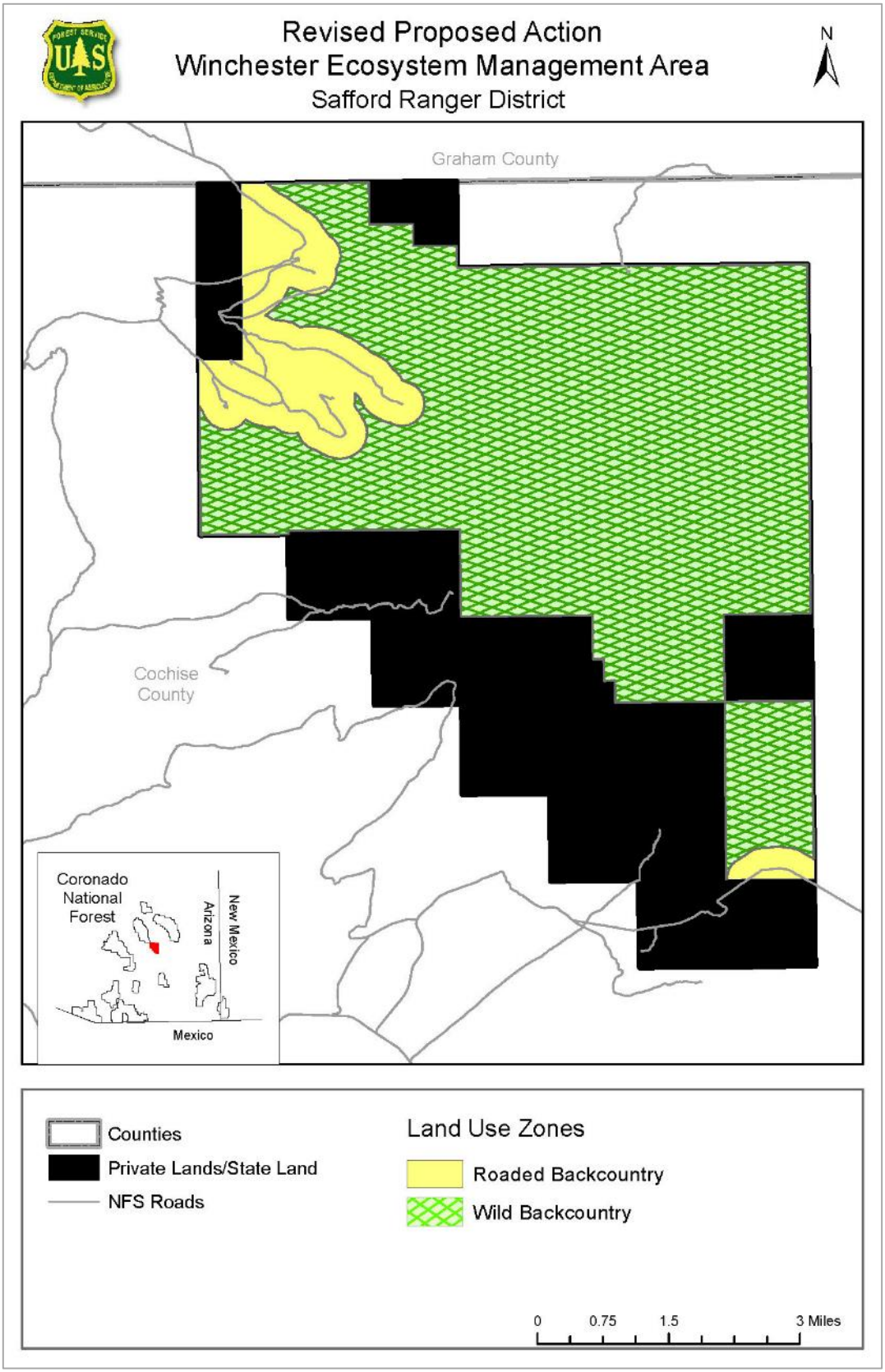

Figure 34. Land use zones and special areas in the Winchester Ecosystem Management Area as proposed by the draft revised forest plan

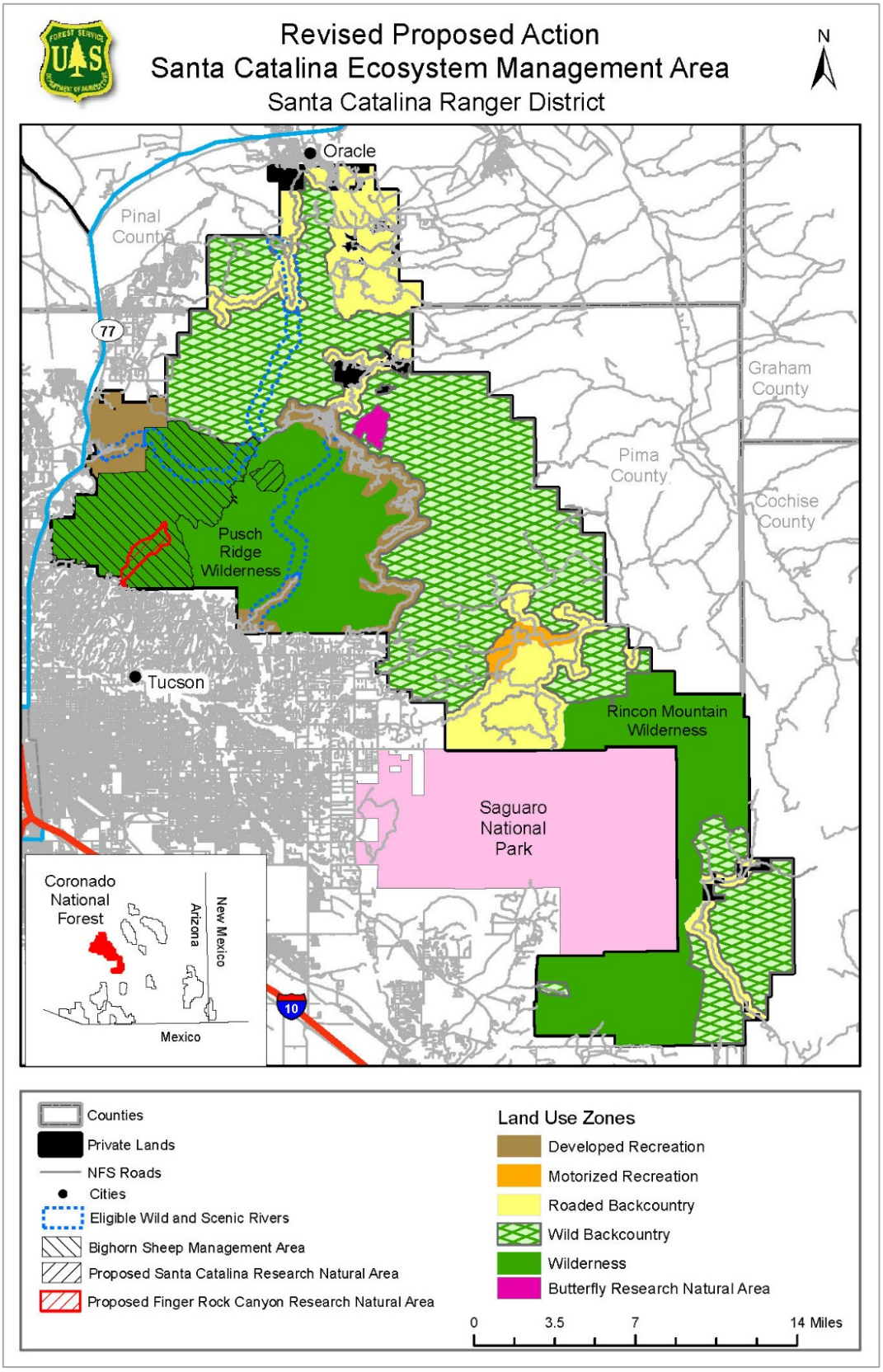

Figure 35. Land use zones and special areas in the Santa Catalina Ecosystem Management Area as proposed by the draft revised forest plan

Part 3 – Alternative 1 Maps

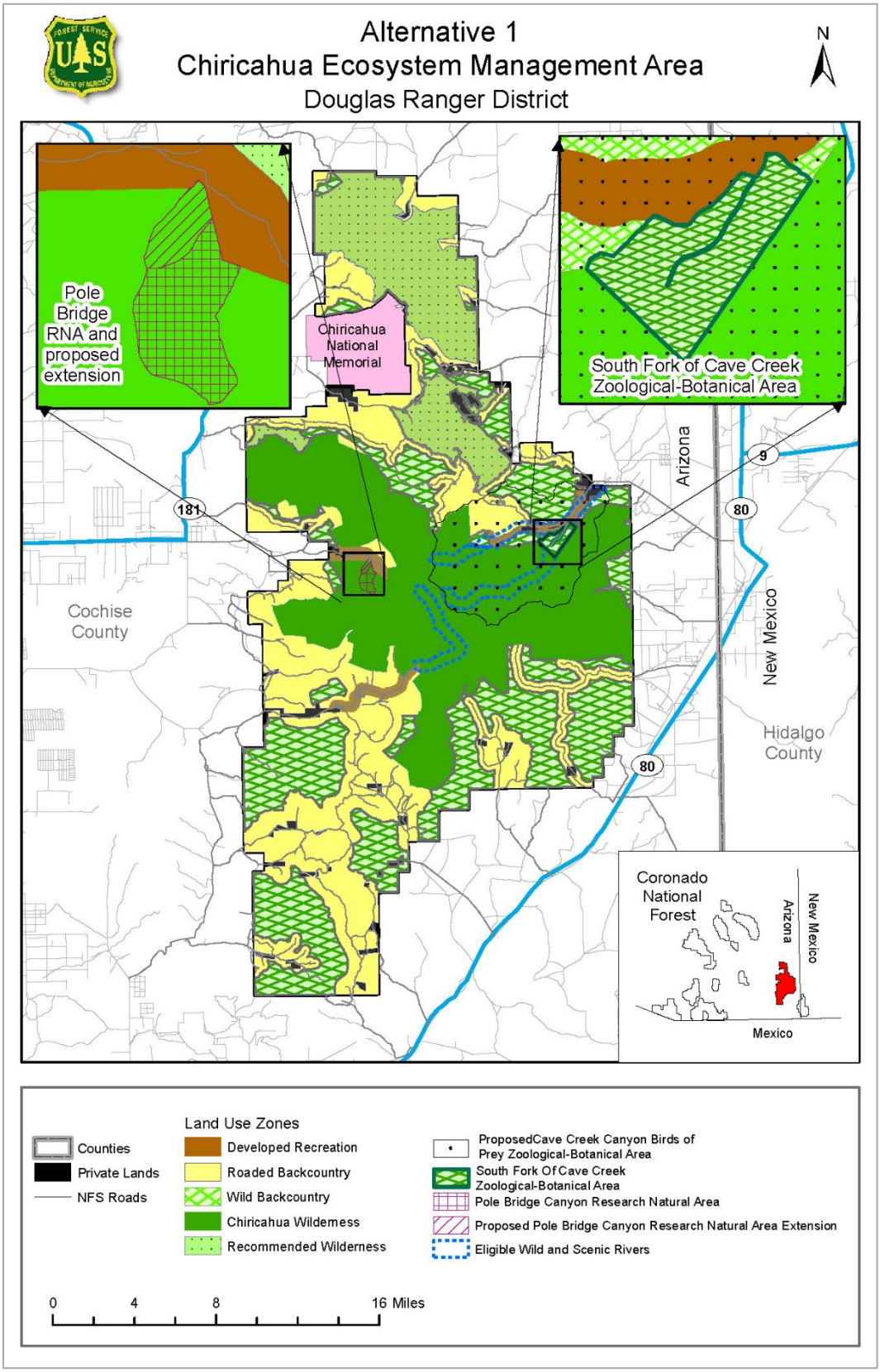

Figure 36. Land use zones and special areas in the Chiricahua Ecosystem Management Area as proposed by alternative 1

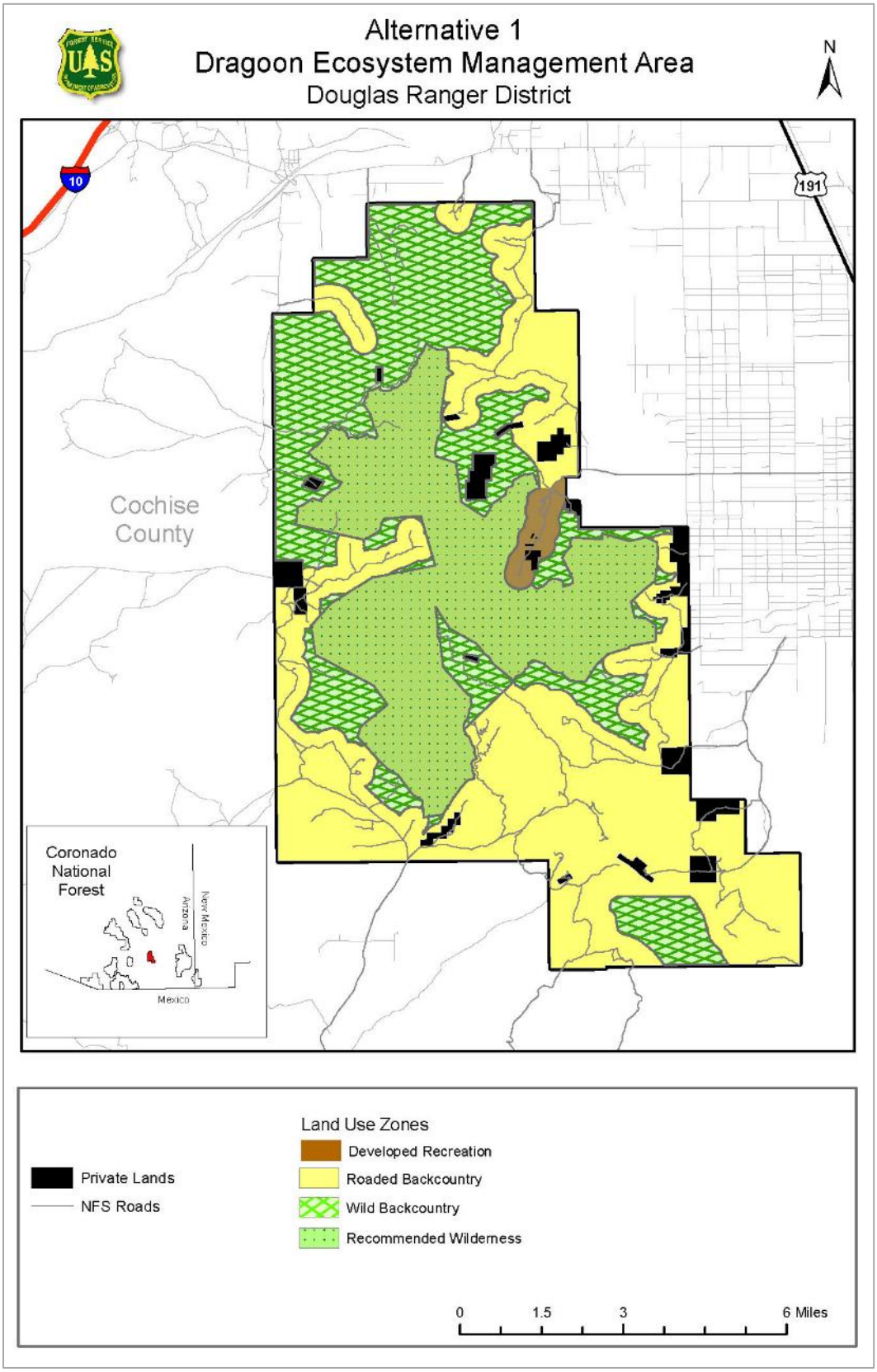

Figure 37. Land use zones and special areas in the Dragoon Ecosystem Management Area as proposed by alternative 1

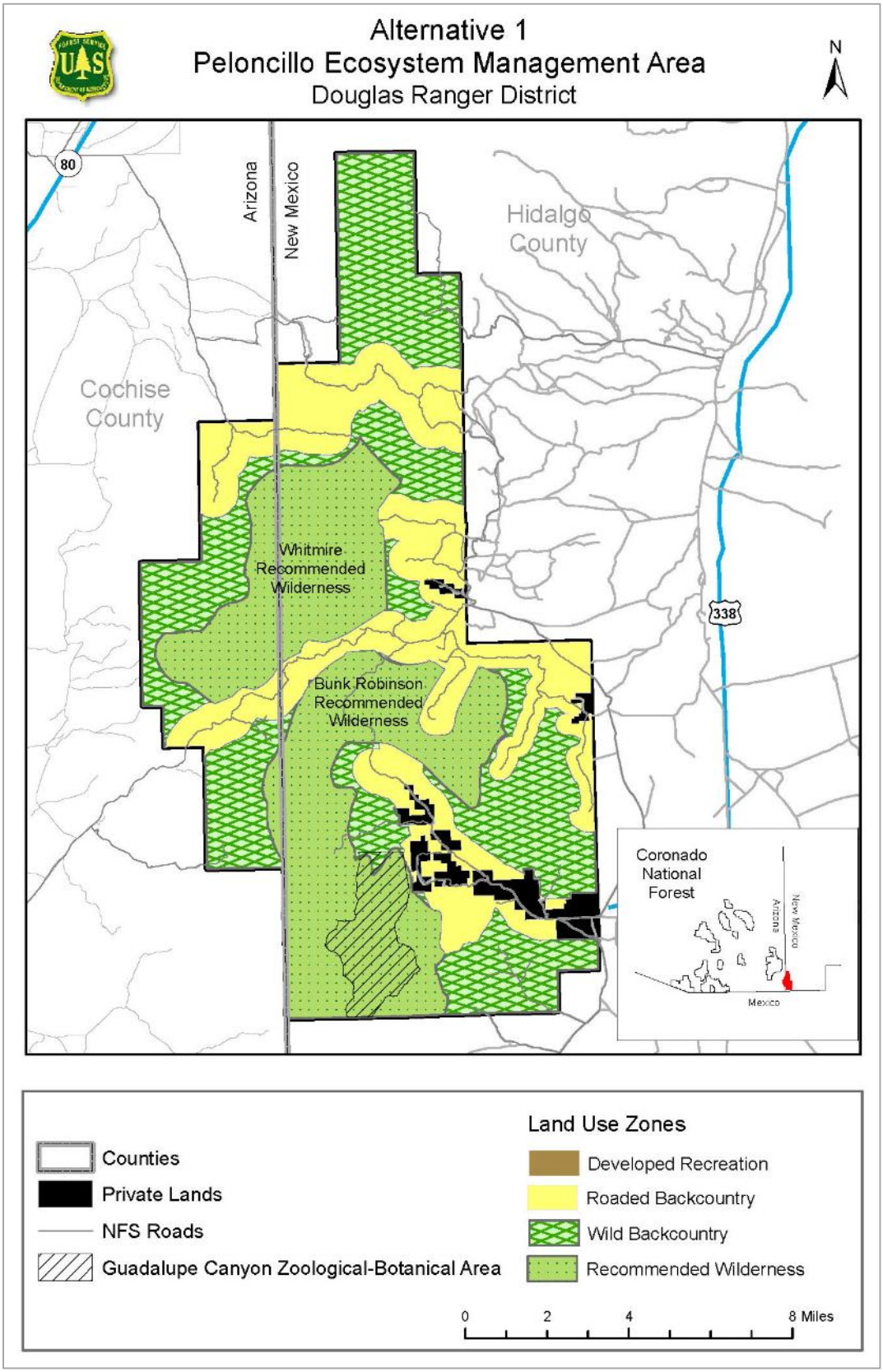

Figure 38. Land use zones and special areas in the Peloncillo Ecosystem Management Area as proposed by alternative 1

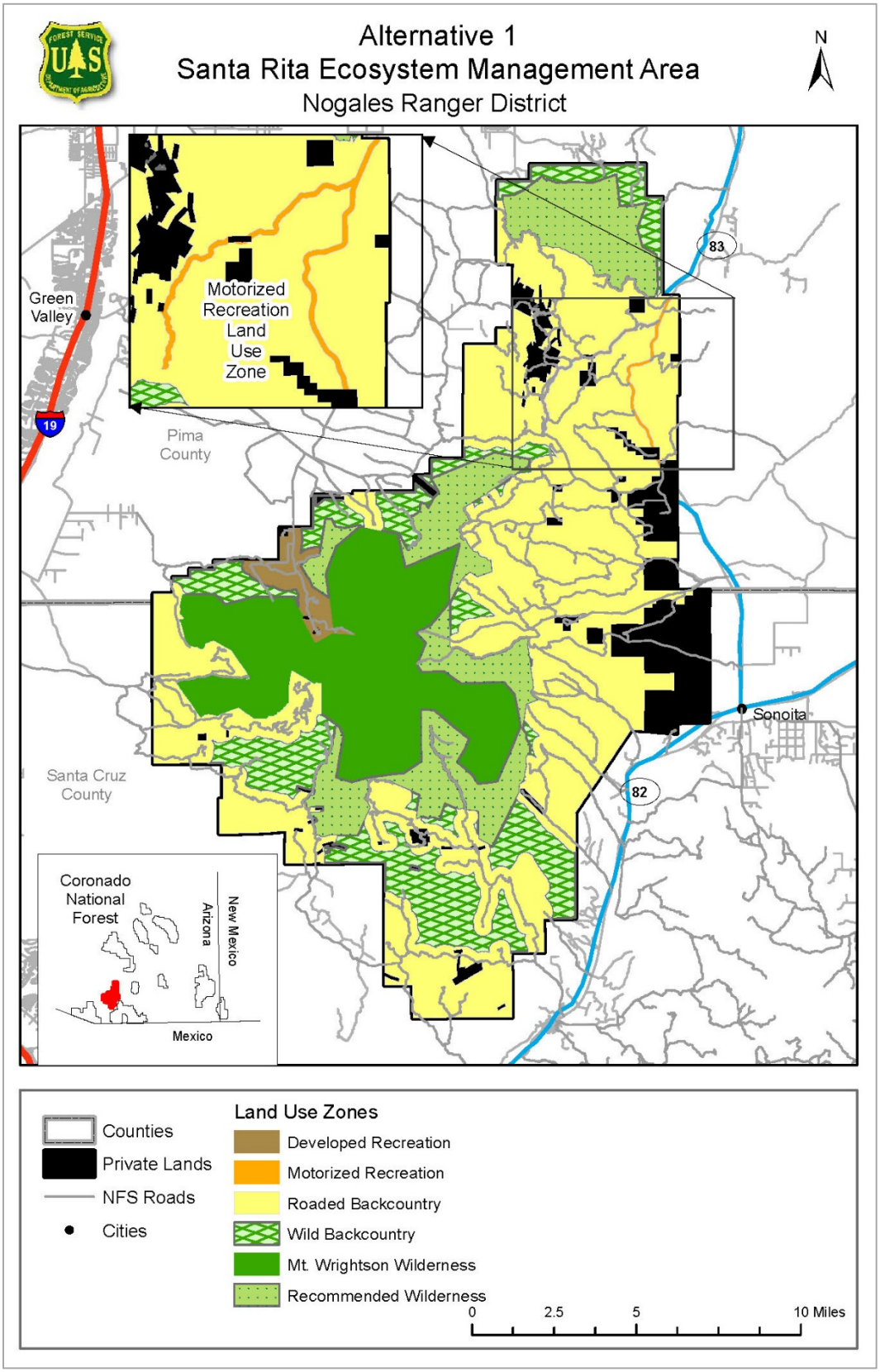

Figure 39. Land use zones and special areas in the Santa Rita Ecosystem Management Area as proposed by alternative 1

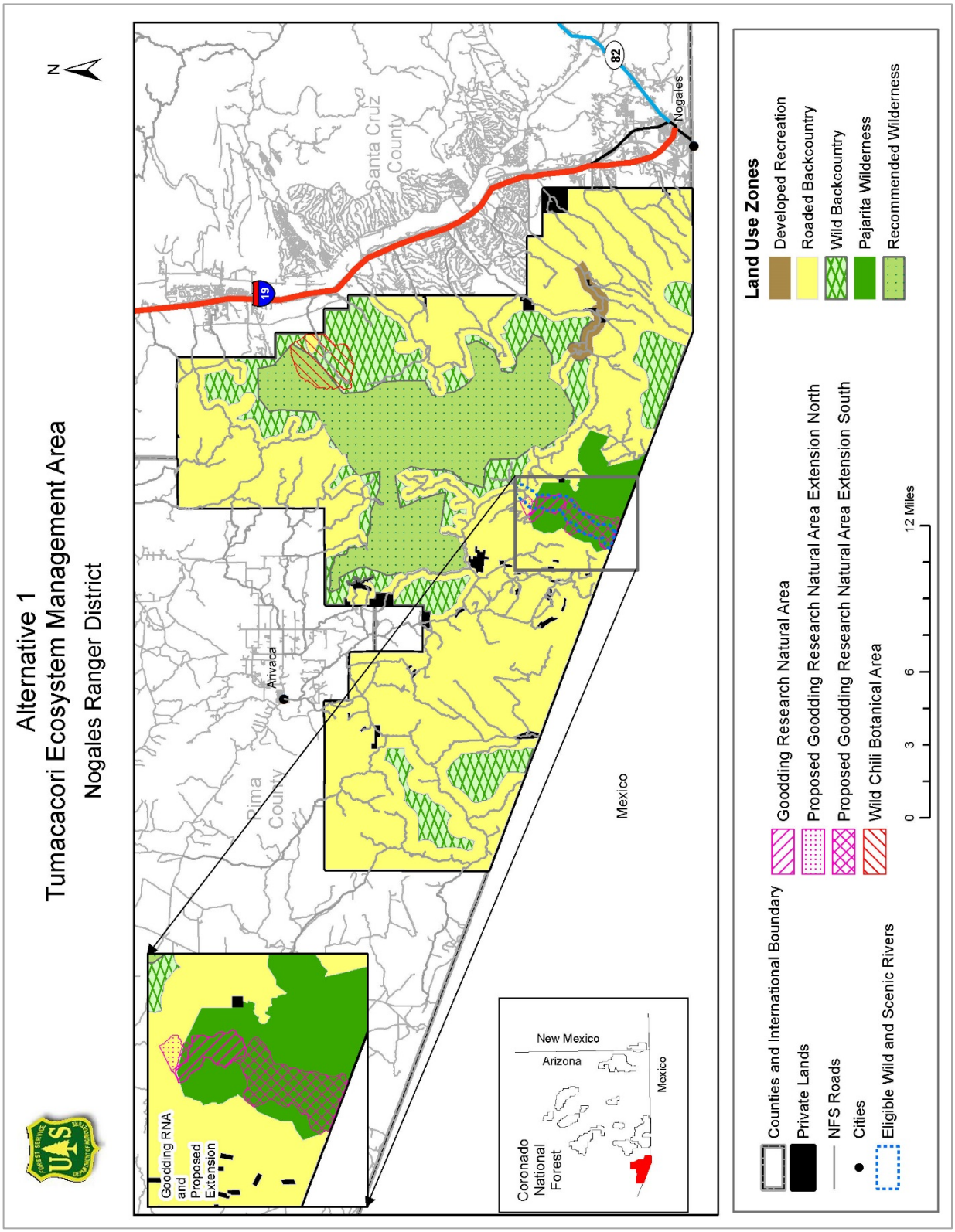

Figure 40. Land use zones and special areas in the Tumacacori Ecosystem Management Area as proposed by alternative 1

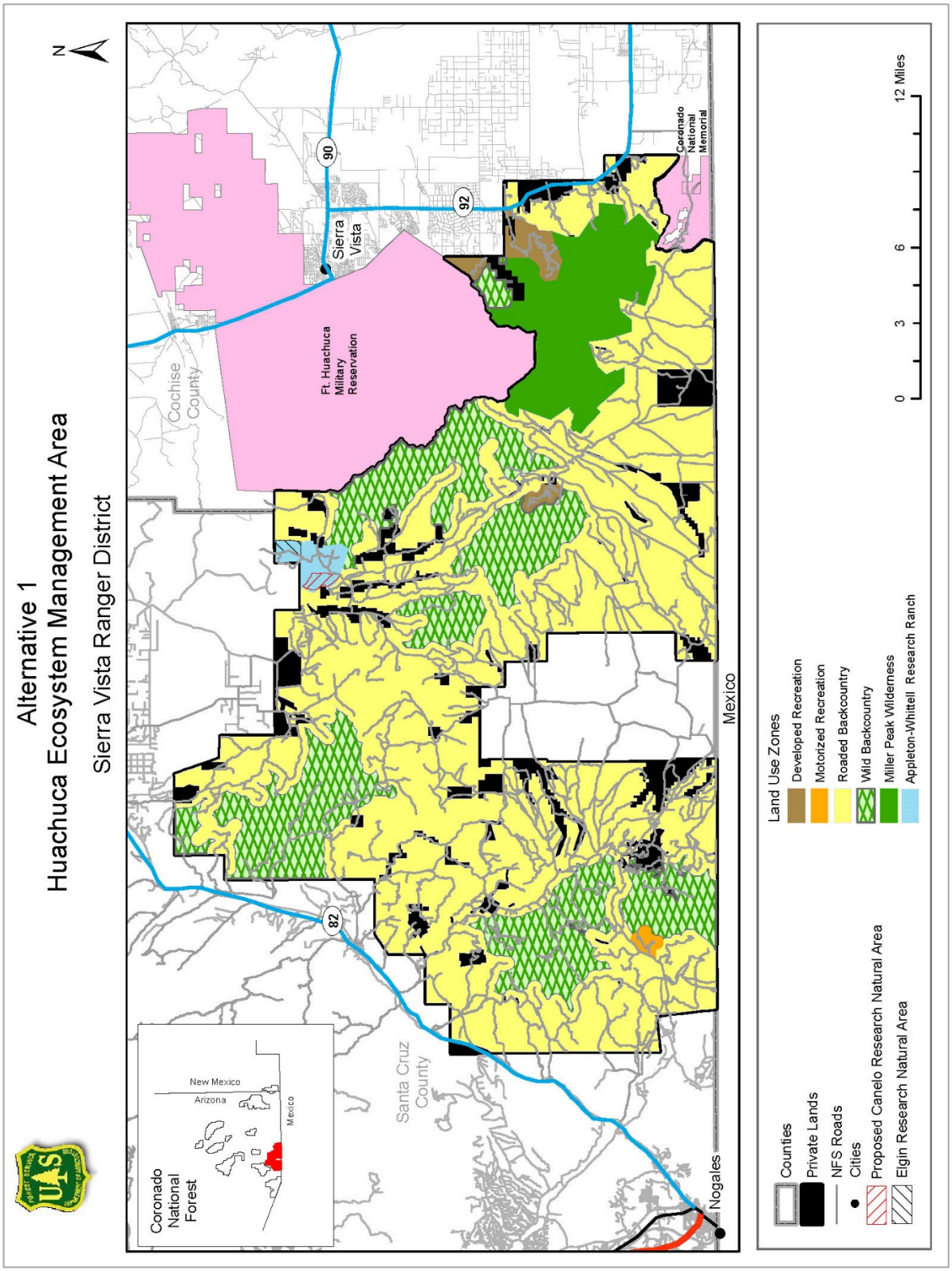

Figure 41. Land use zones and special areas in the Huachuca Ecosystem Management Area as proposed by alternative 1

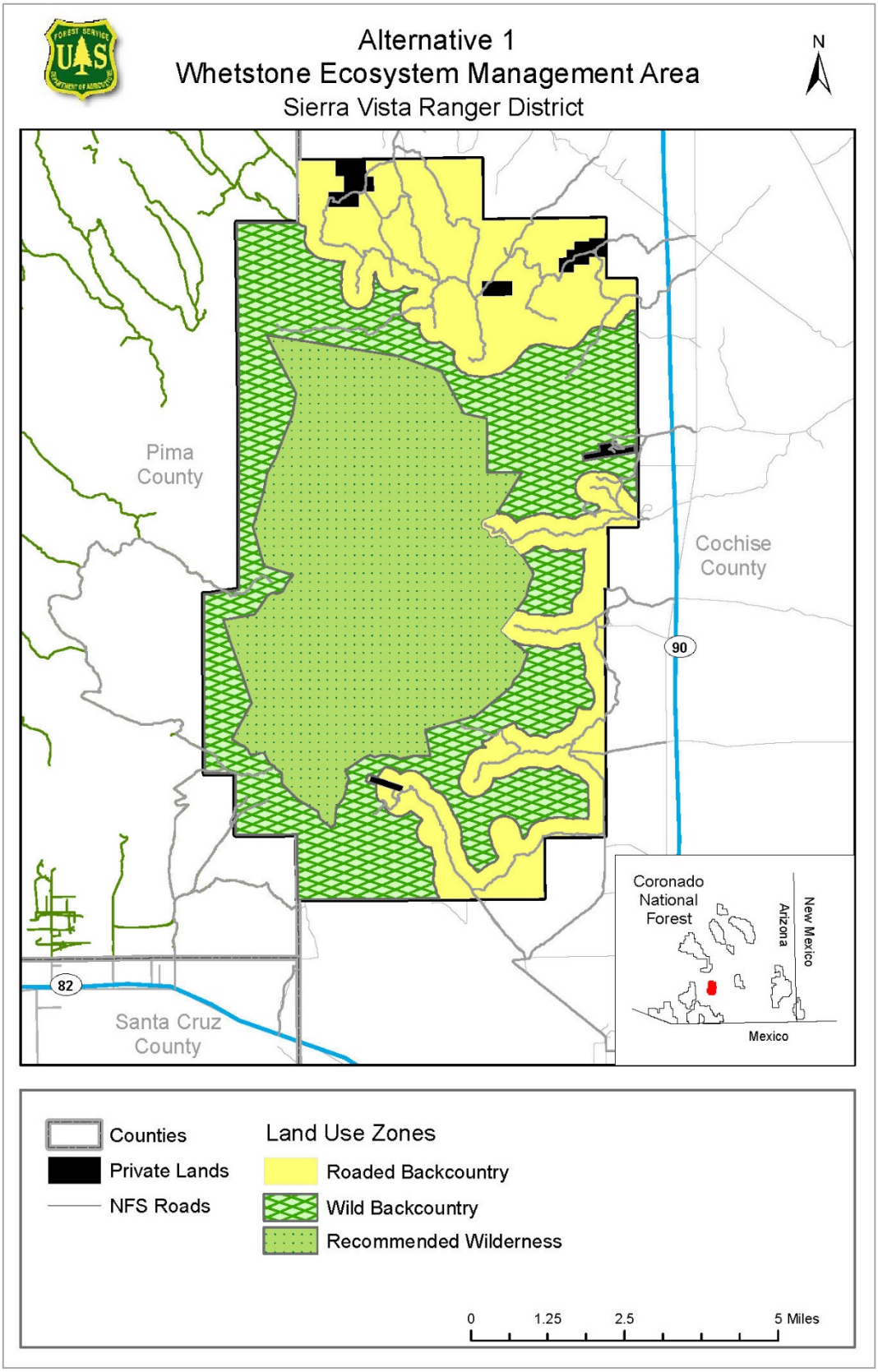

Figure 42. Land use zones and special areas in the Whetstone Ecosystem Management Area as proposed by alternative 1

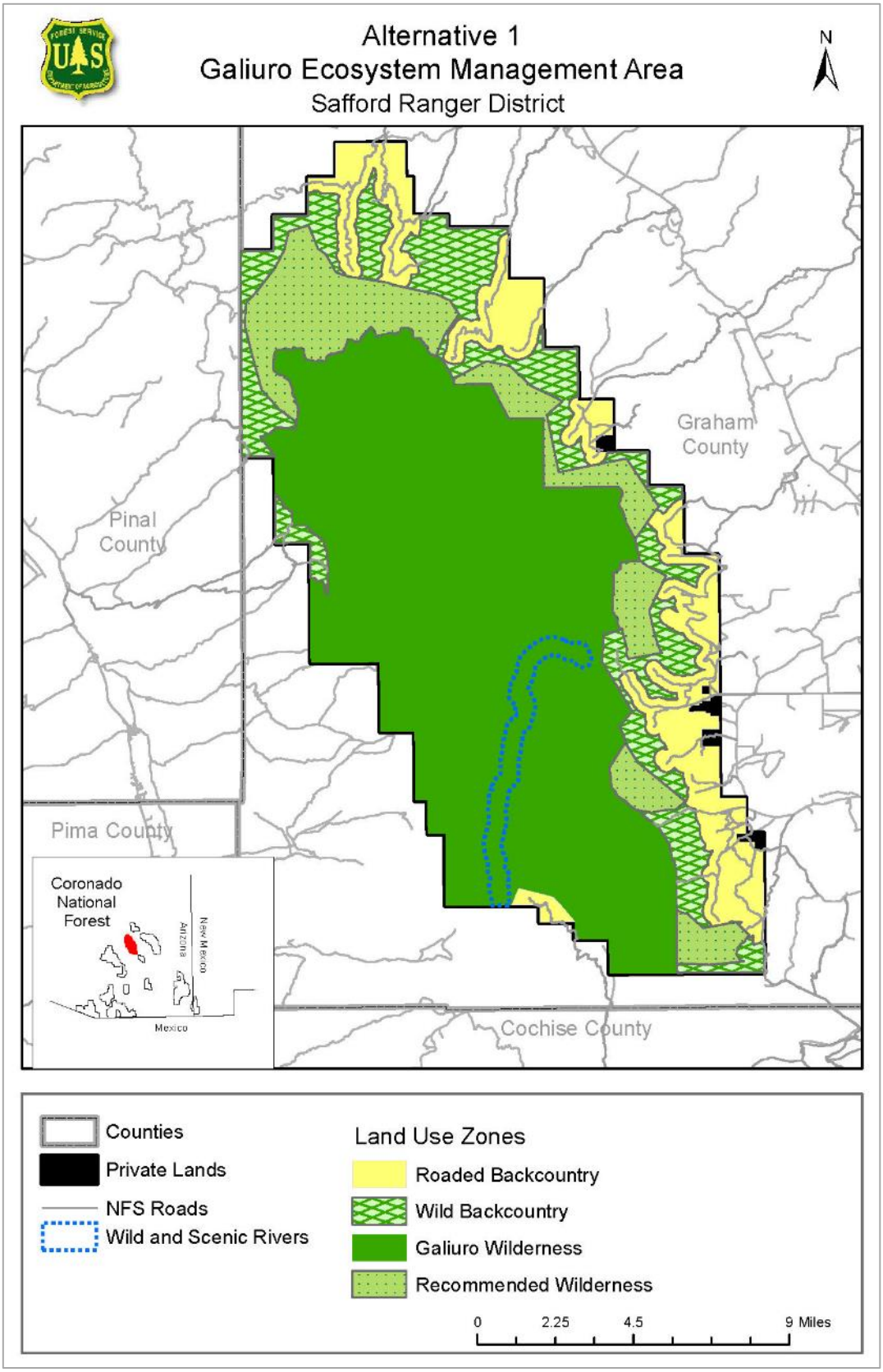

Figure 43. Land use zones and special areas in the Galiuro Ecosystem Management Area as proposed by alternative 1

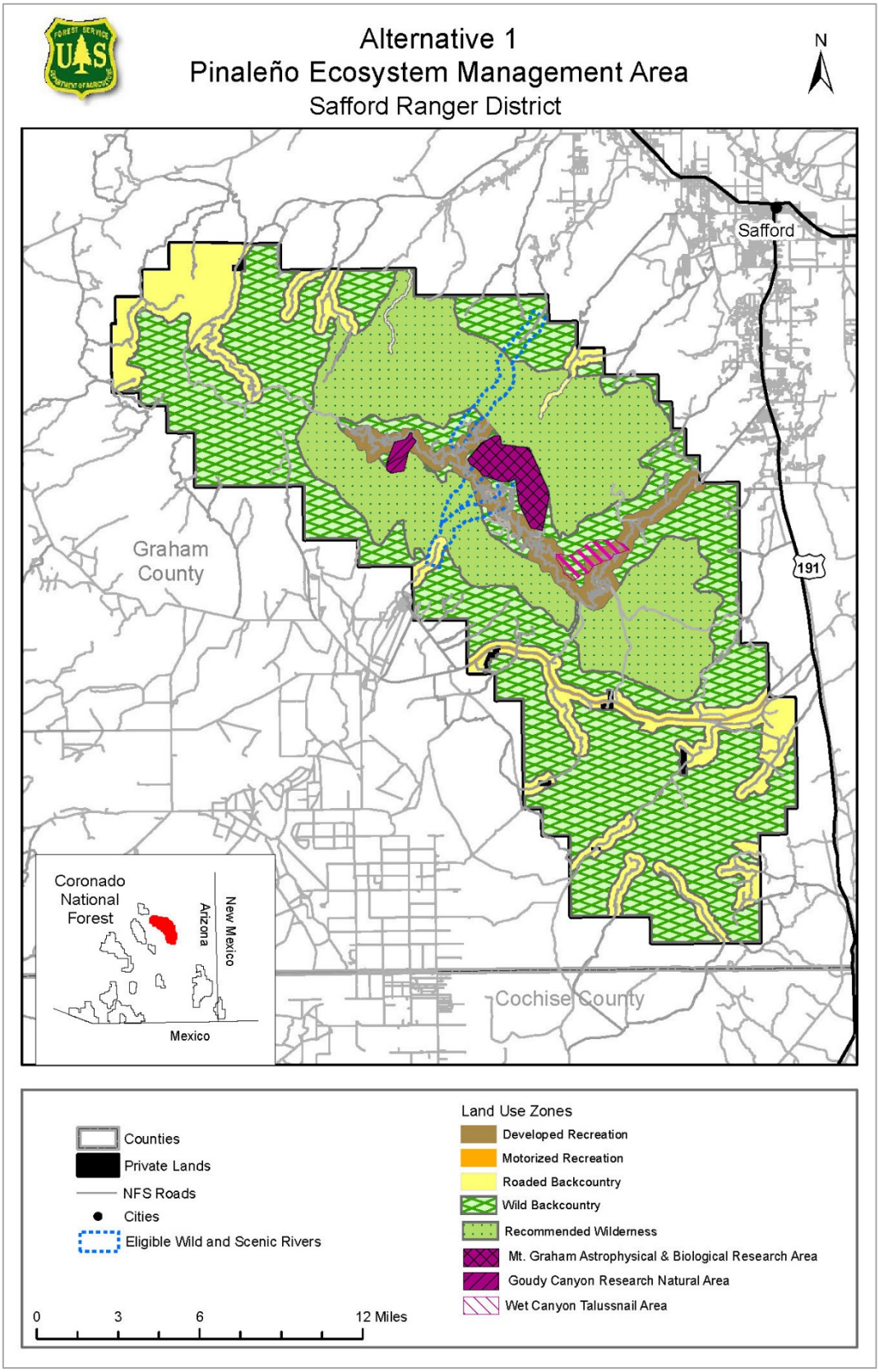

Figure 44. Land use zones and special areas in the Pinaleño Ecosystem Management Area as proposed by alternative 1

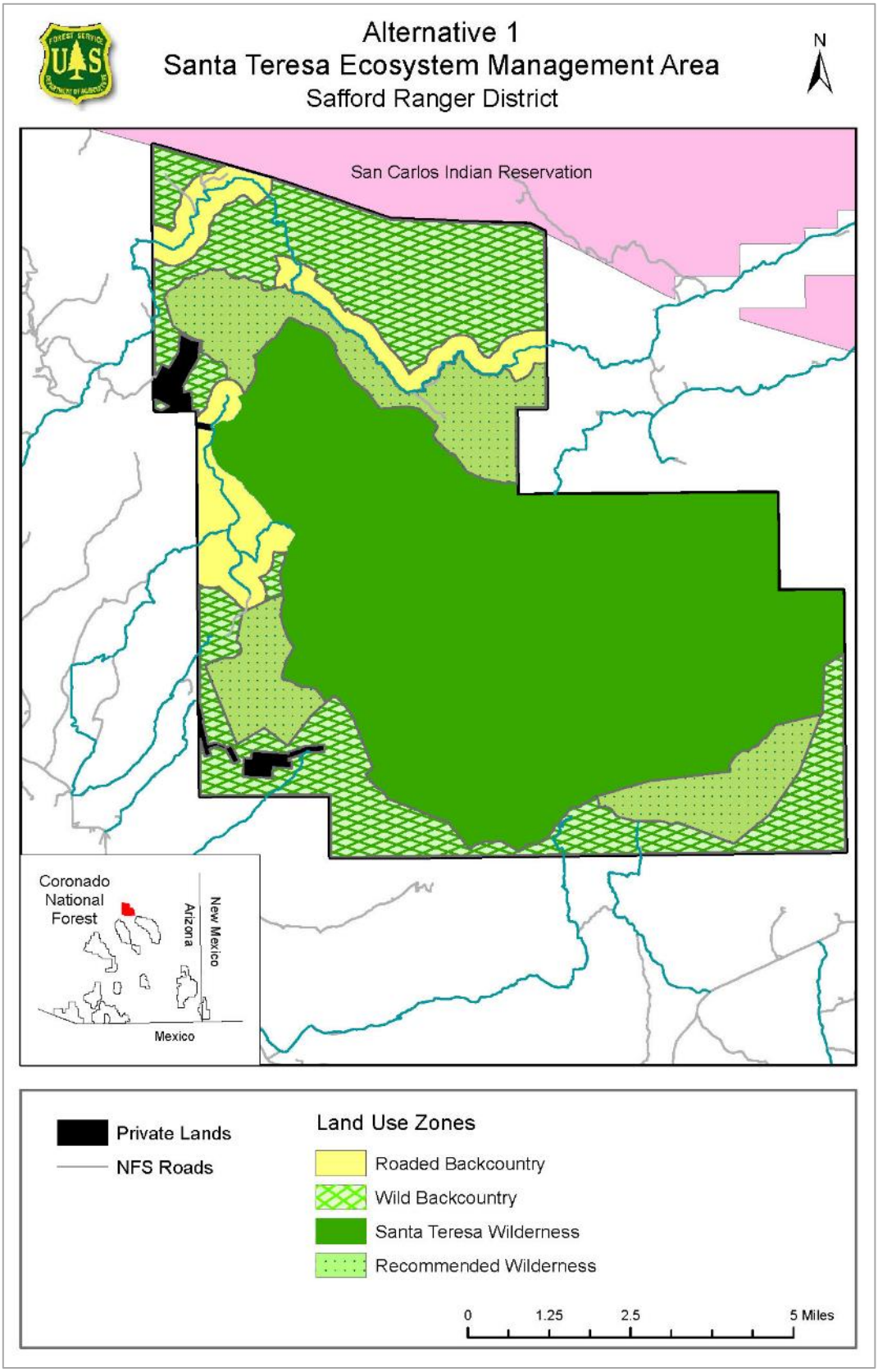

Figure 45. Land use zones and special areas in the Santa Teresa Ecosystem Management Area as proposed by alternative 1

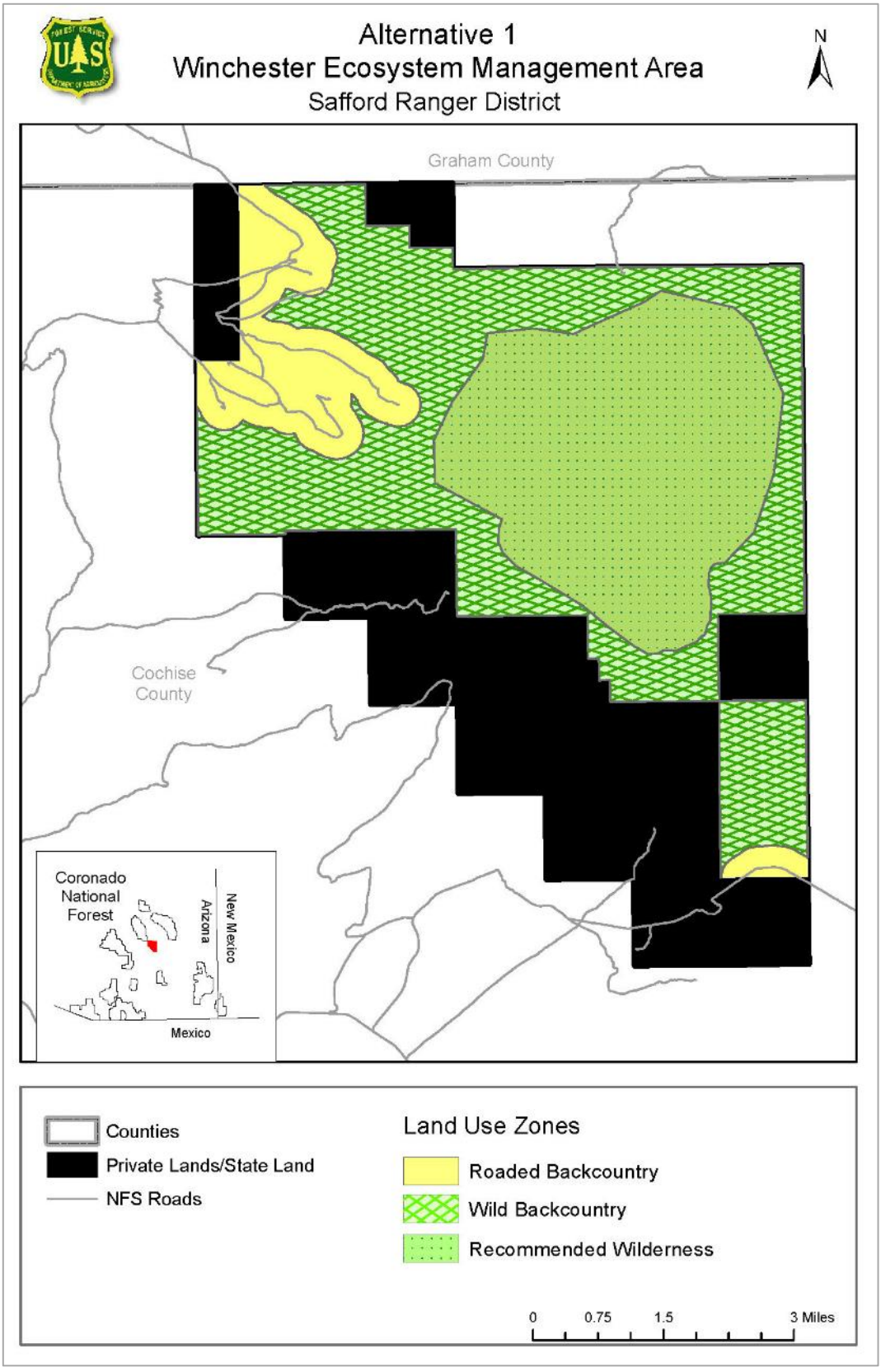

Figure 46. Land use zones and special areas in the Winchester Ecosystem Management Area as proposed by alternative 1

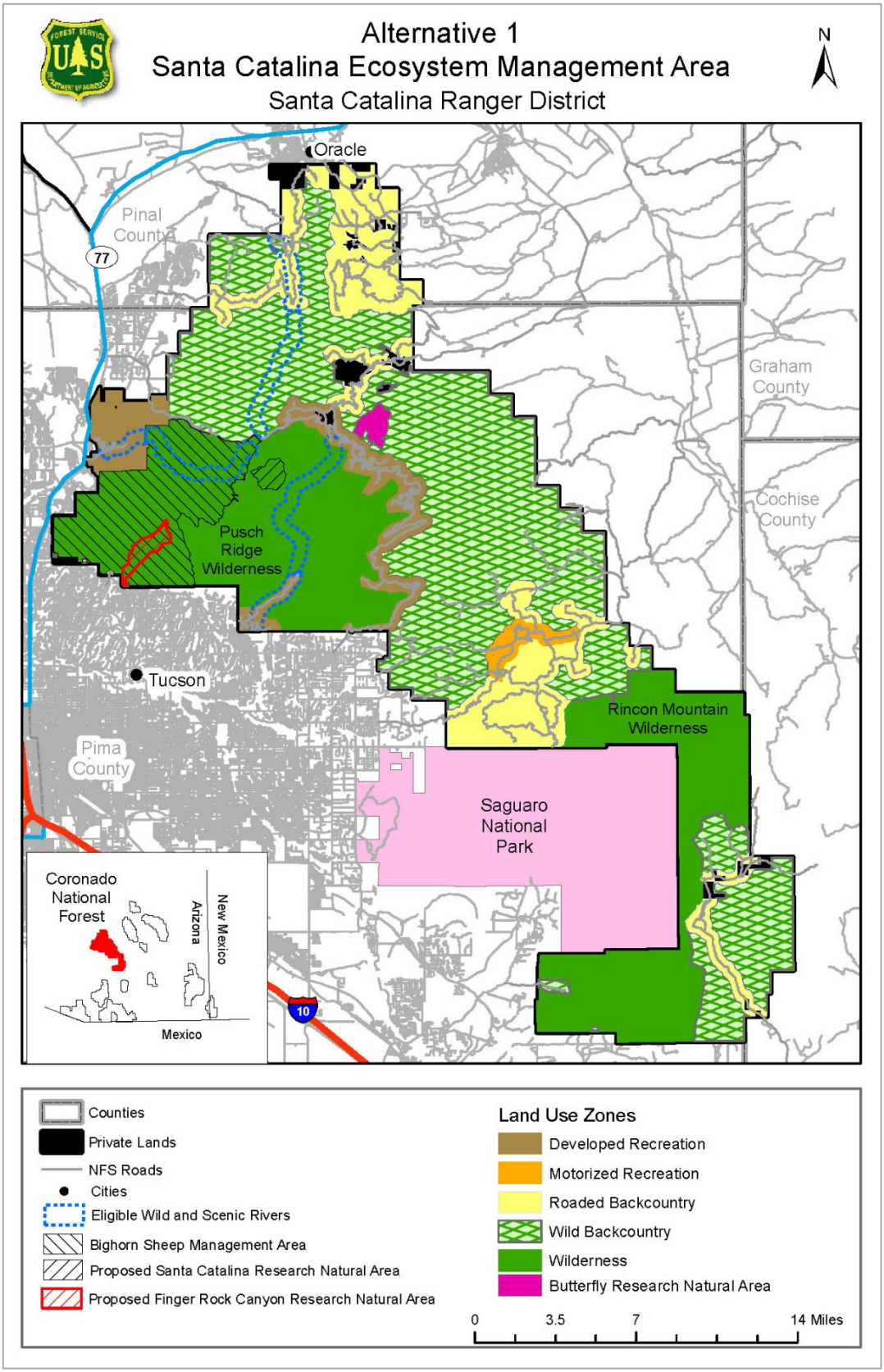

Figure 47. Land use zones and special areas in the Santa Catalina Ecosystem Management Area as proposed by alternative 1

Part 4 – Alternative 2 Maps

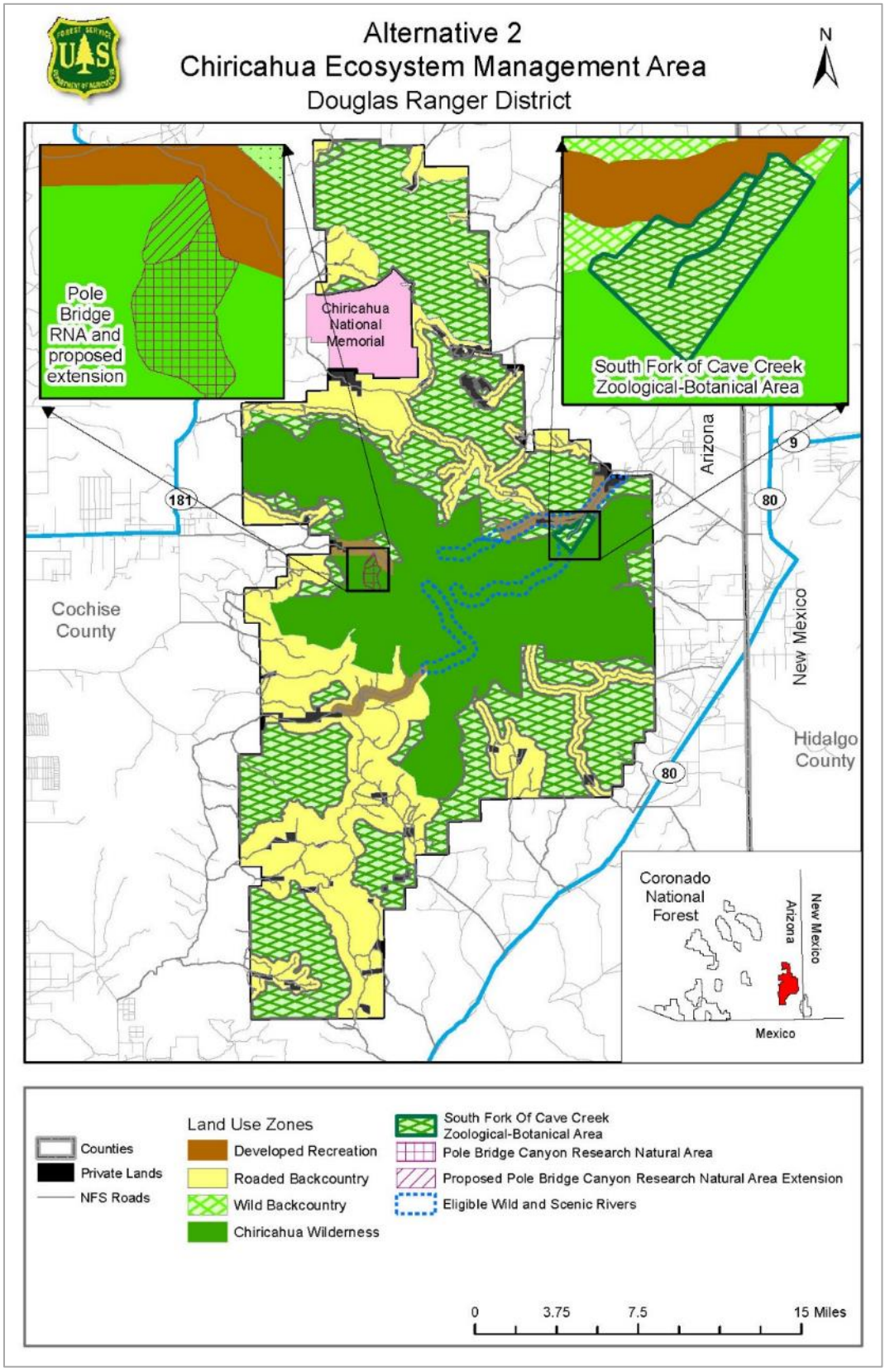

Figure 48. Land use zones and special areas in the Chiricahua Ecosystem Management Area as proposed by alternative 2

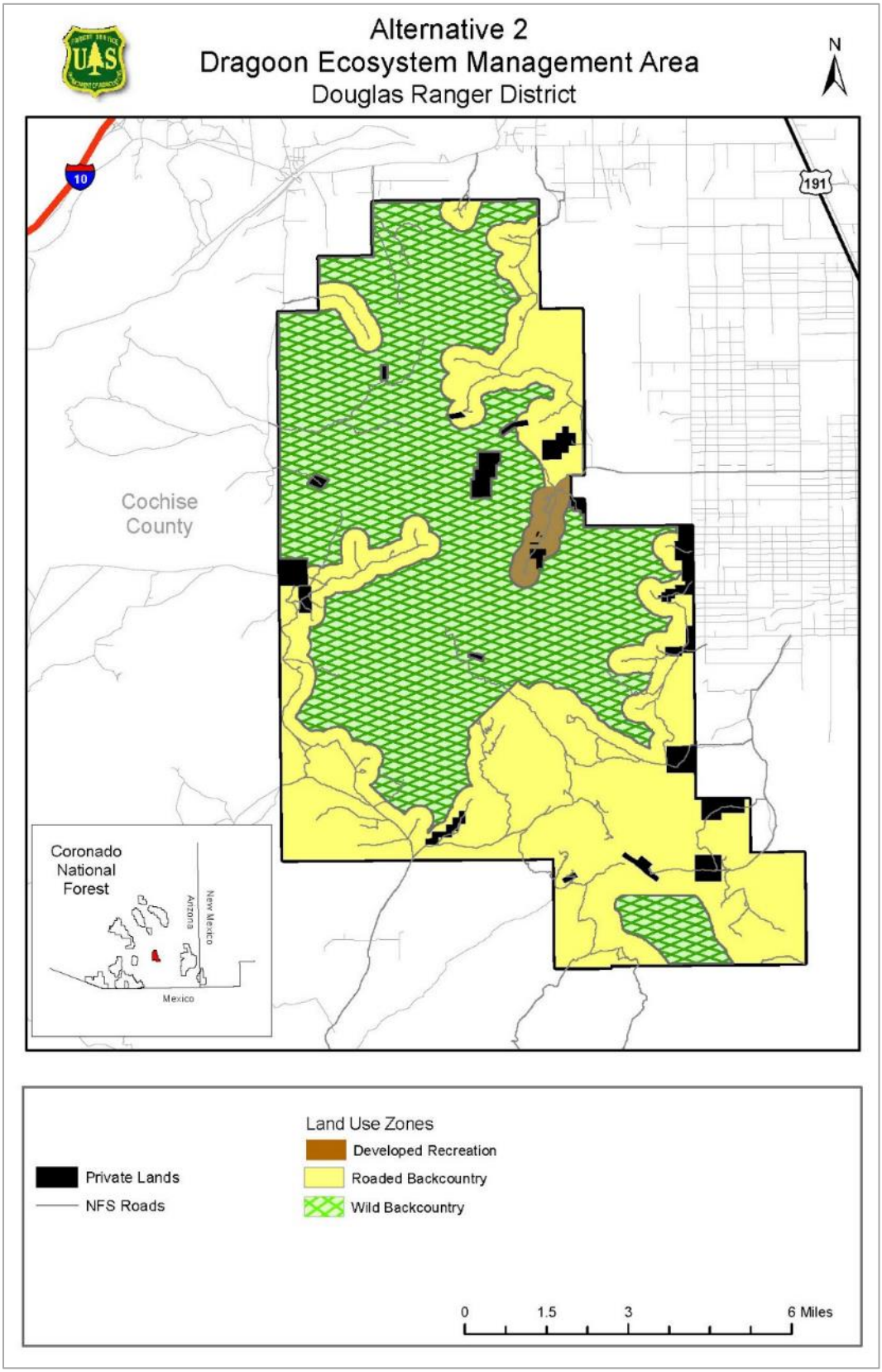

Figure 49. Land use zones and special areas in the Dragoon Ecosystem Management Area as proposed by alternative 2

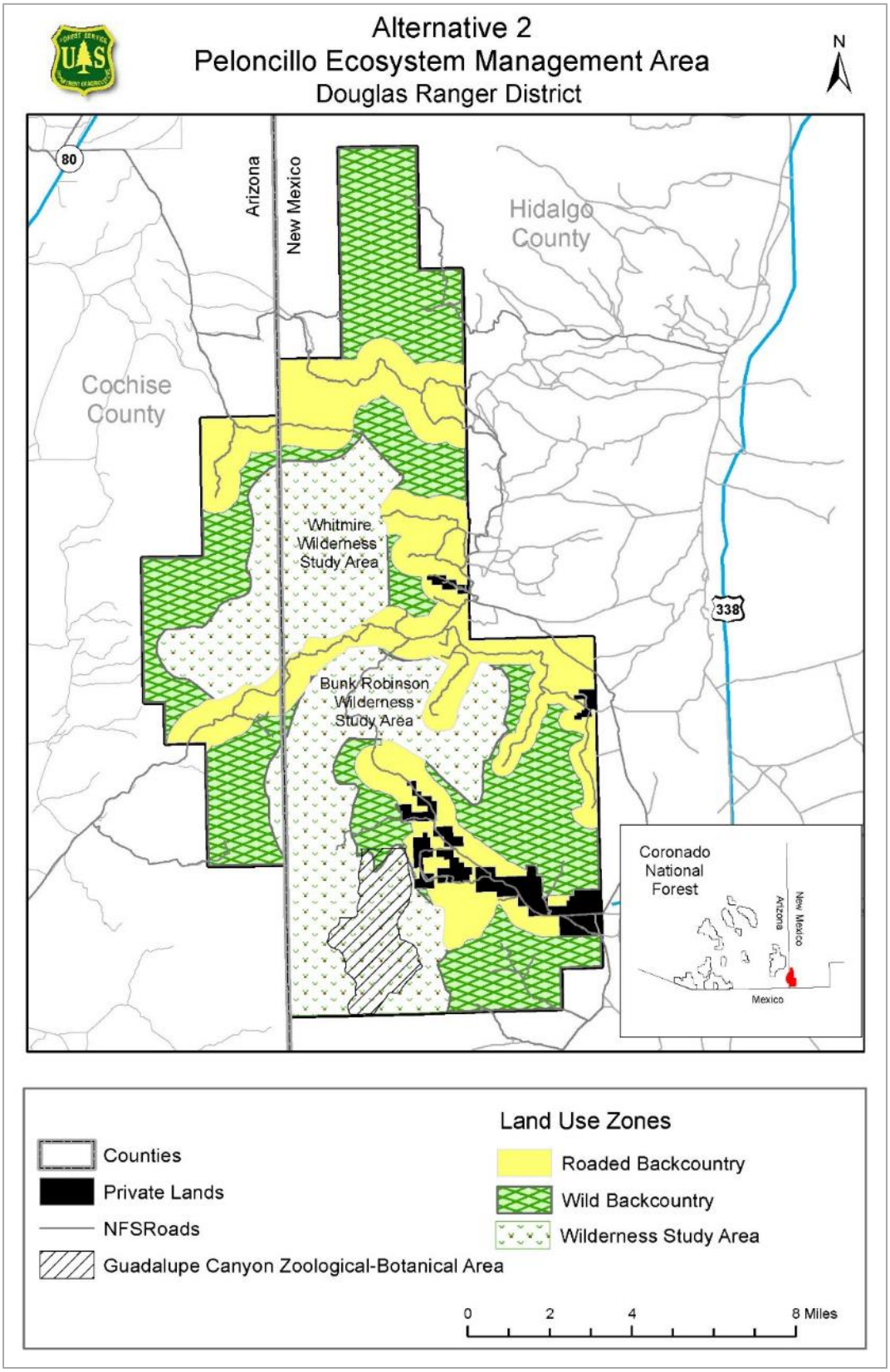

Figure 50. Land use zones and special areas in the Peloncillo Ecosystem Management Area as proposed by alternative 2

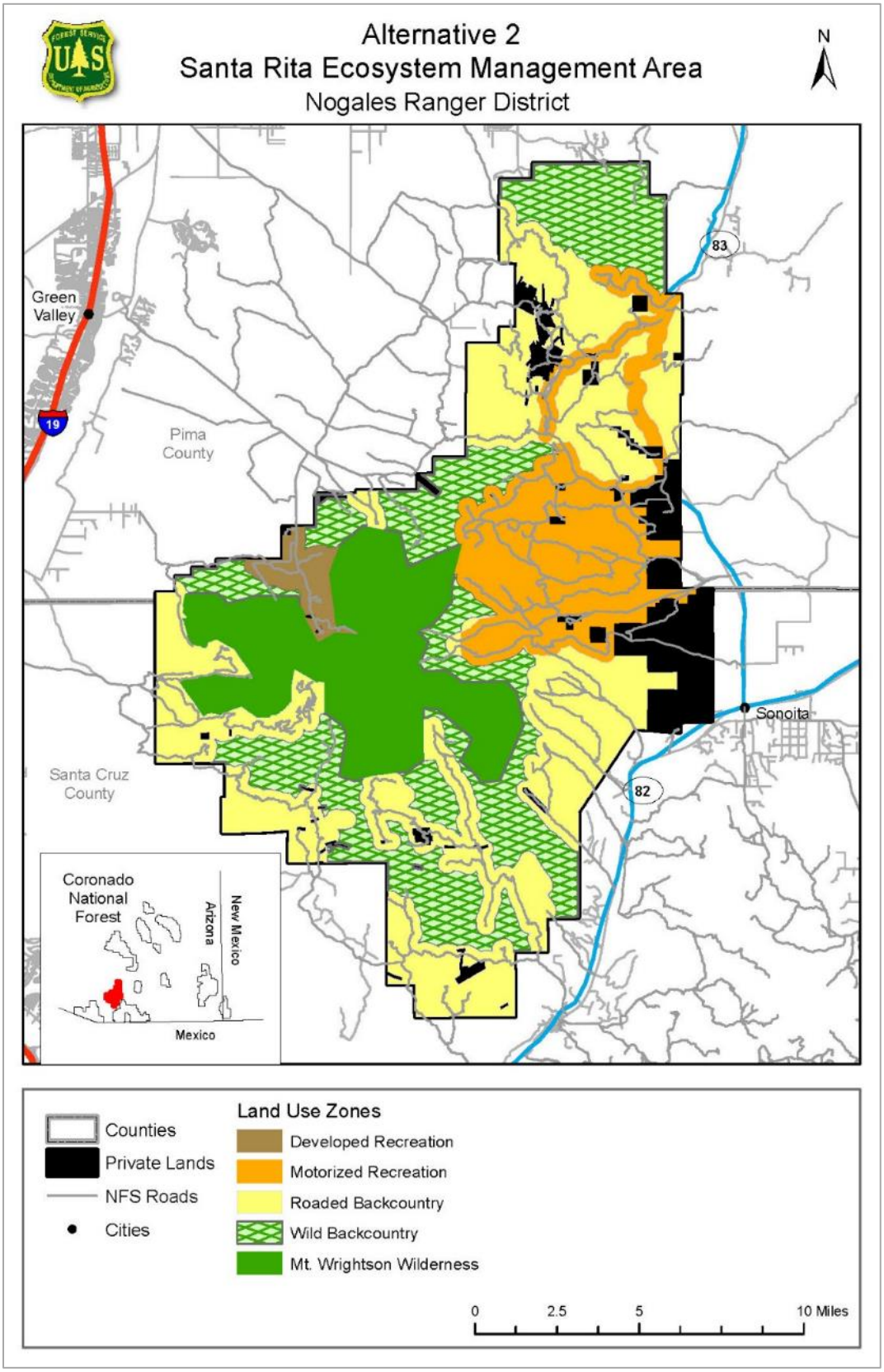

Figure 51. Land use zones and special areas in the Santa Rita Ecosystem Management Area as proposed by alternative 2

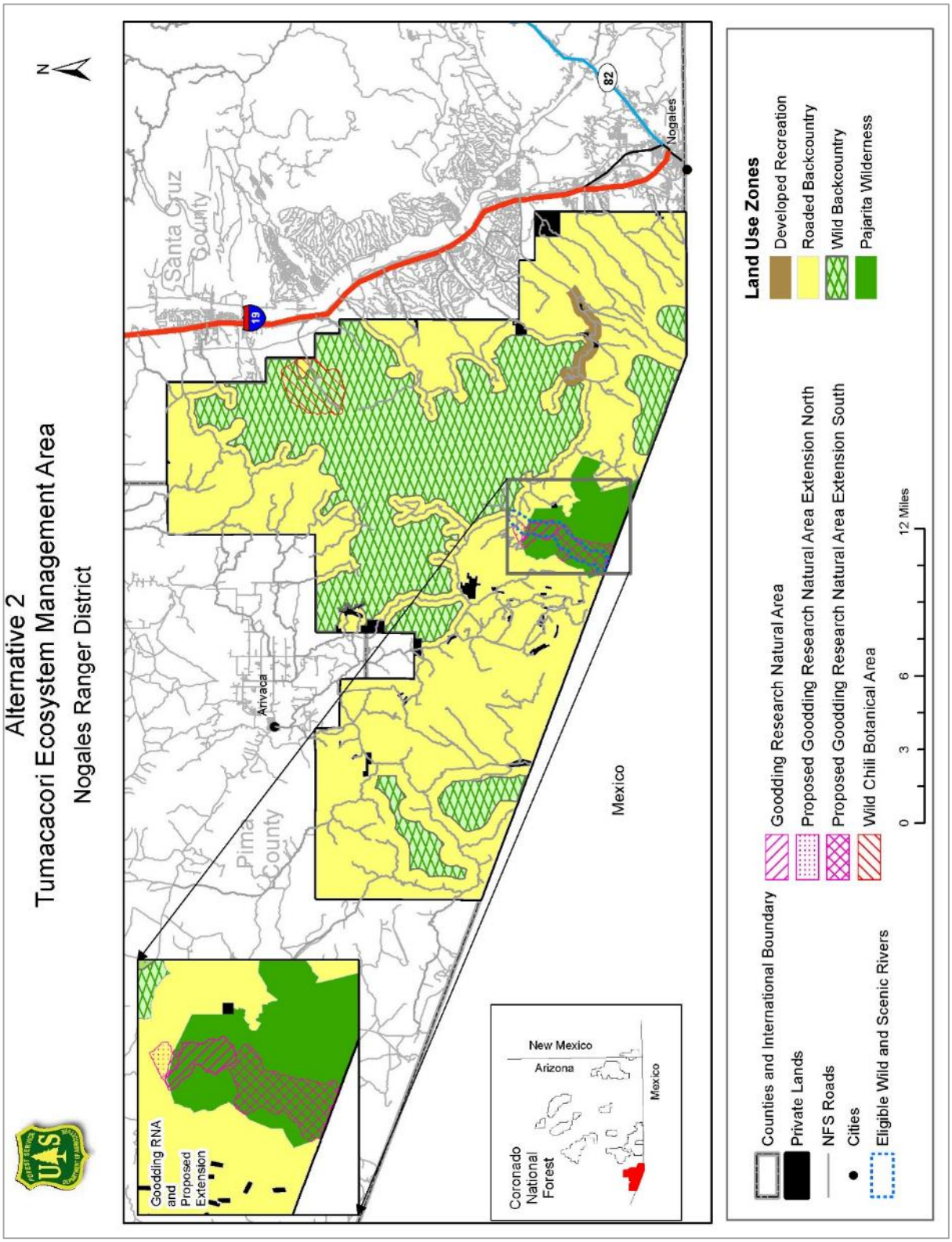

Figure 52. Land use zones and special areas in the Tumacacori Ecosystem Management Area as proposed by alternative 2

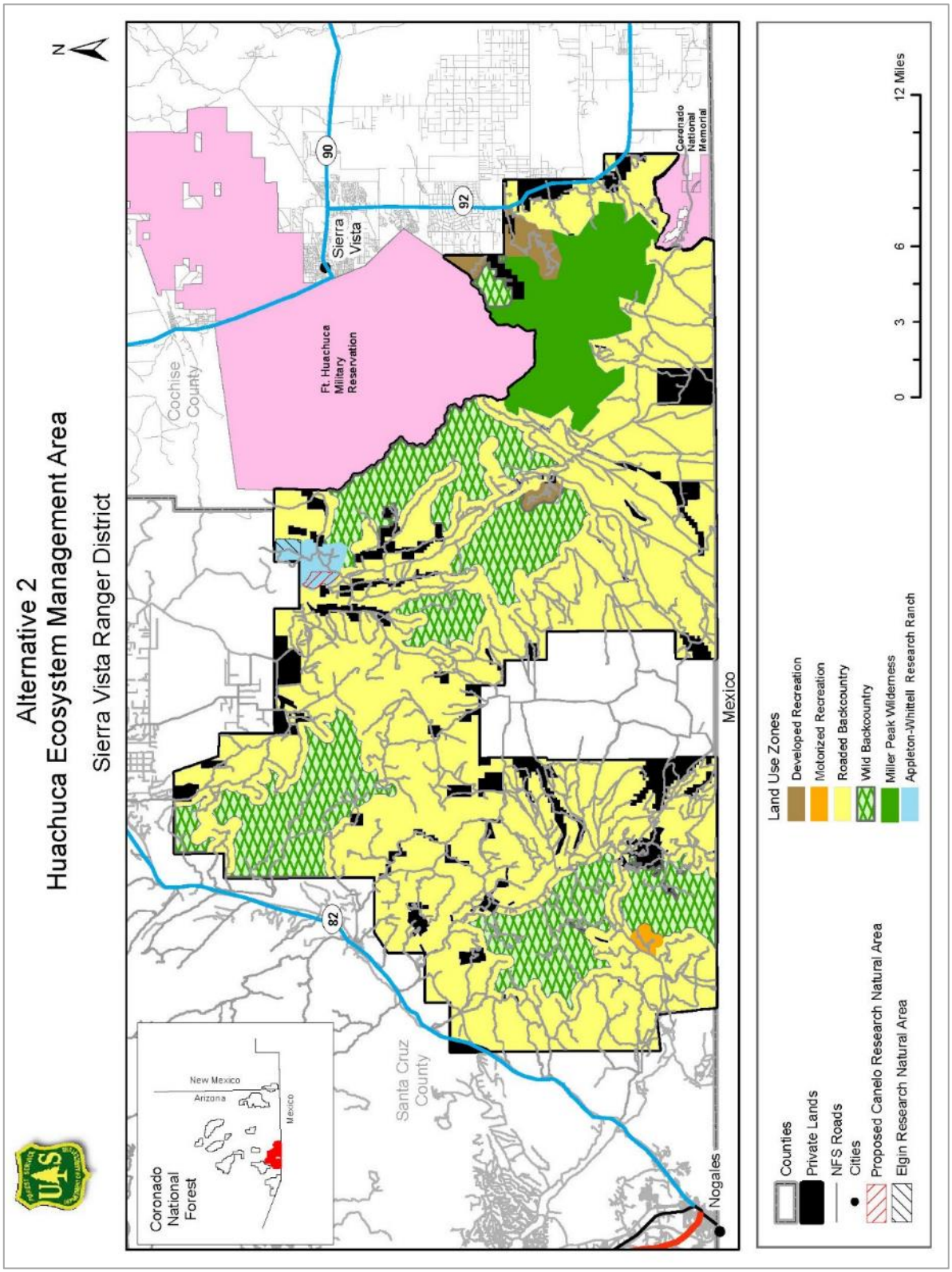

Figure 53. Land use zones and special areas in the Huachuca Ecosystem Management Area as proposed by alternative 2

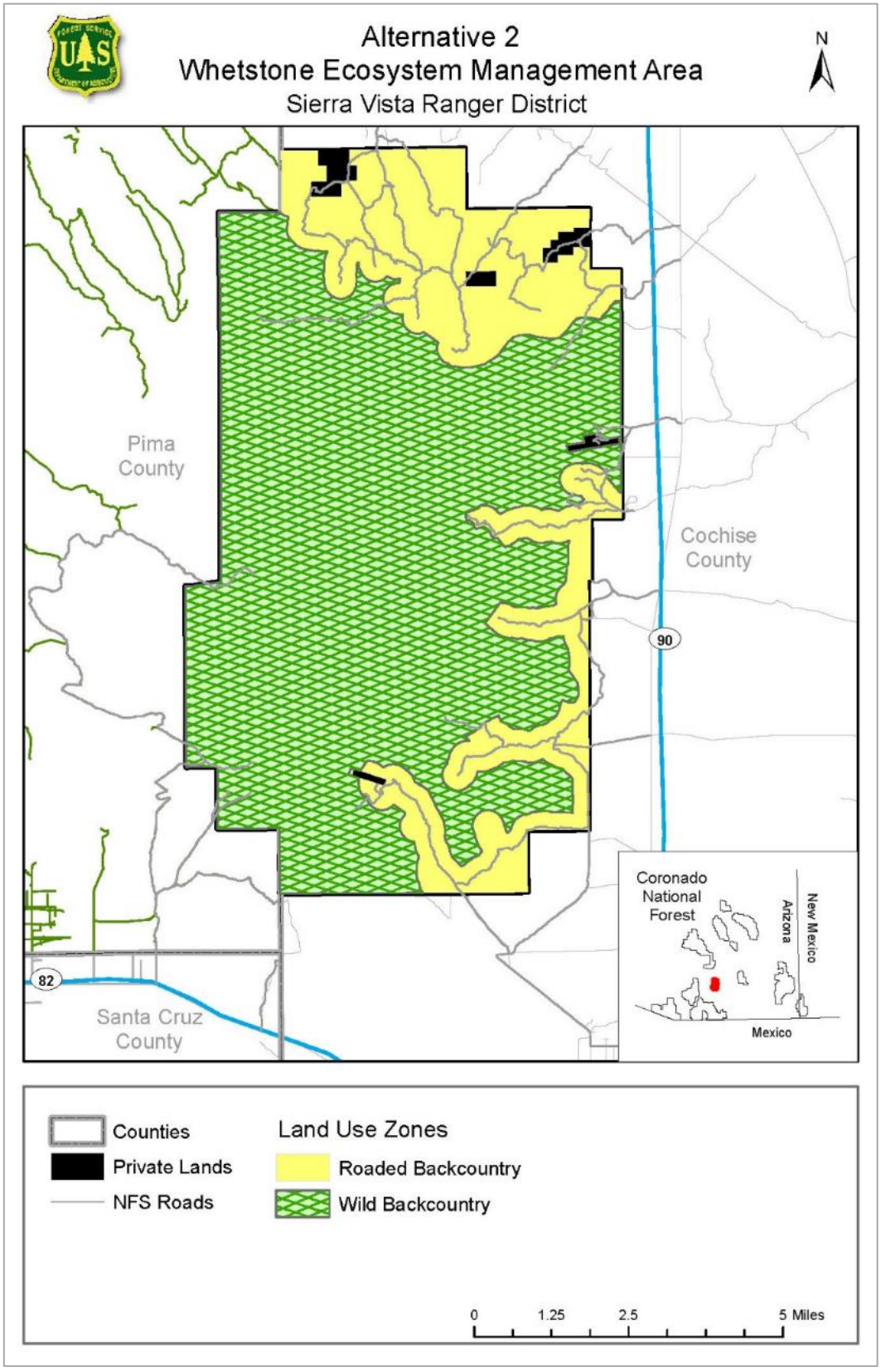

Figure 54. Land use zones and special areas in the Whetstone Ecosystem Management Area as proposed by alternative 2

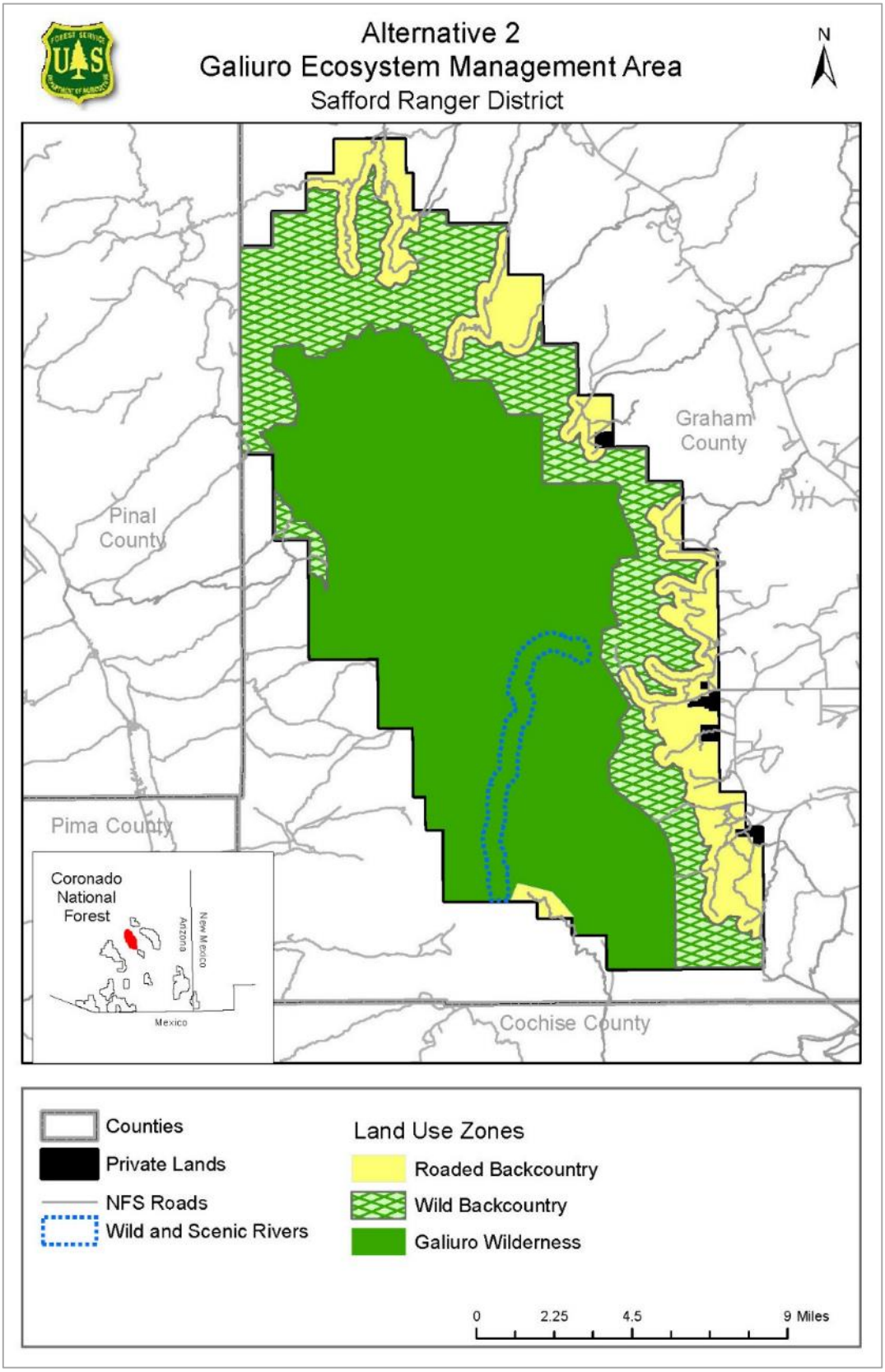

Figure 55. Land use zones and special areas in the Galiuro Ecosystem Management Area as proposed by alternative 2

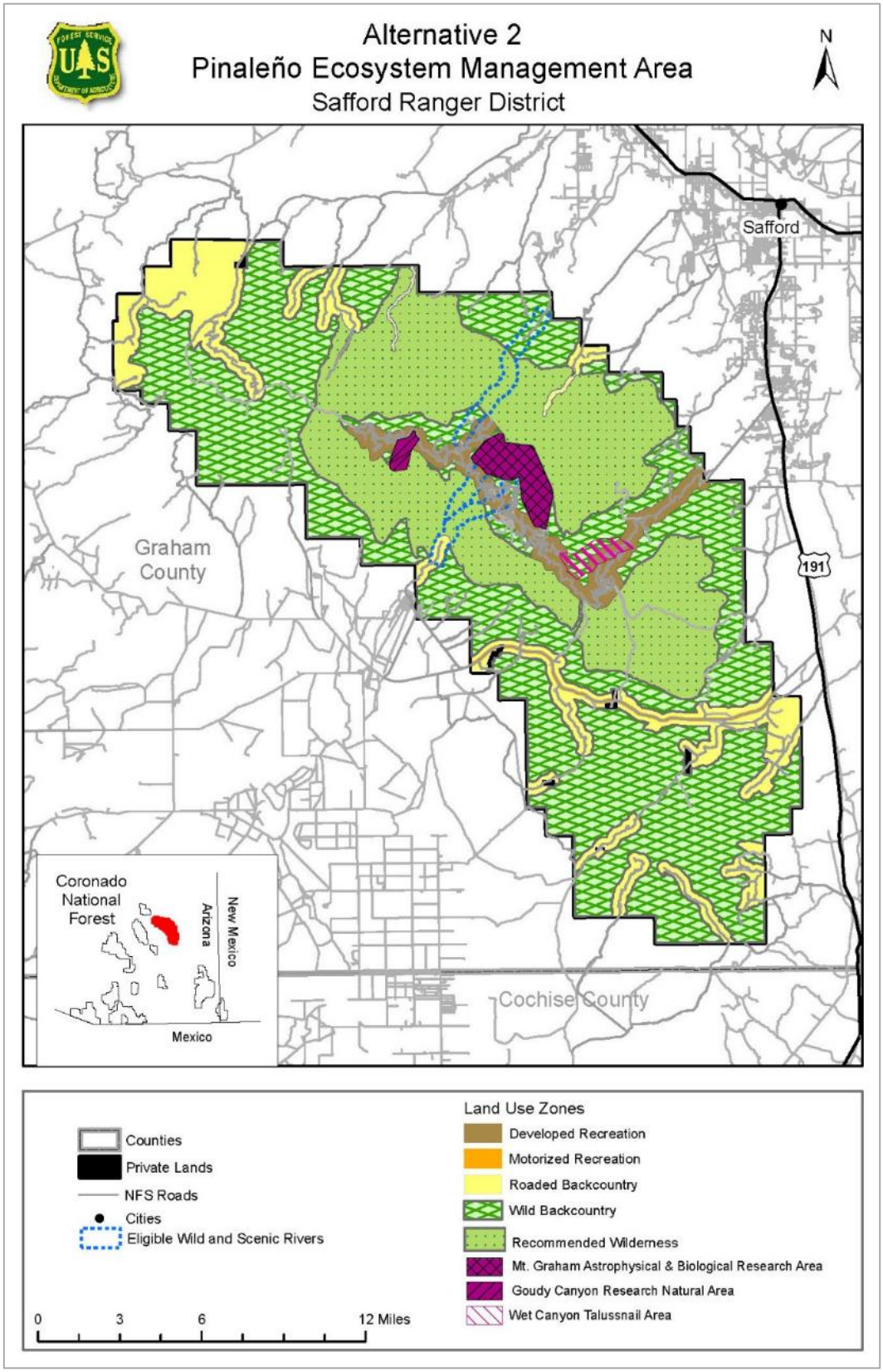

Figure 56. Land use zones and special areas in the Pinaleño Ecosystem Management Area as proposed by alternative 2

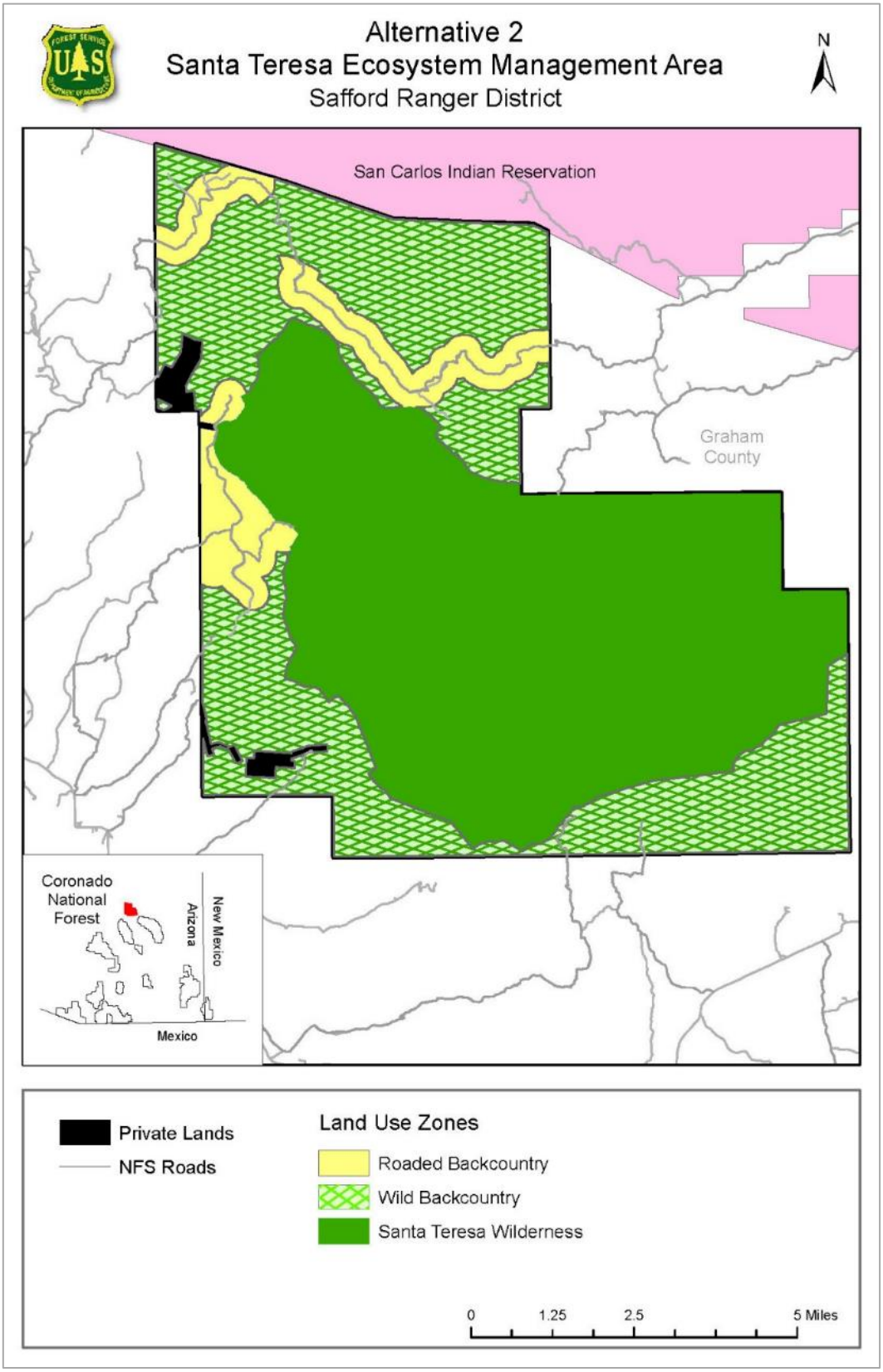

Figure 57. Land use zones and special areas in the Santa Teresa Ecosystem Management Area as proposed by alternative 2

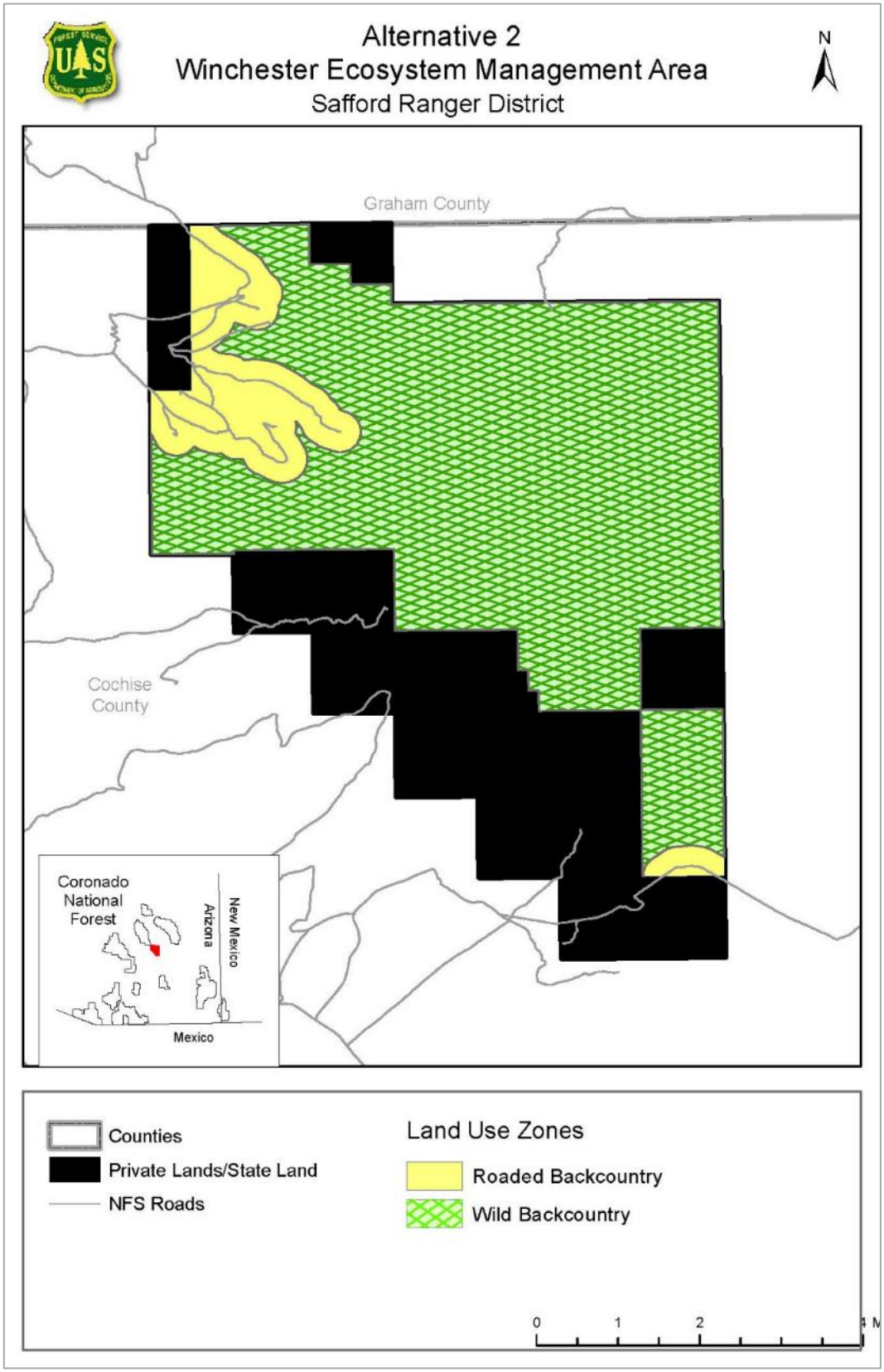

Figure 58. Land use zones and special areas in the Winchester Ecosystem Management Area as proposed by alternative 2

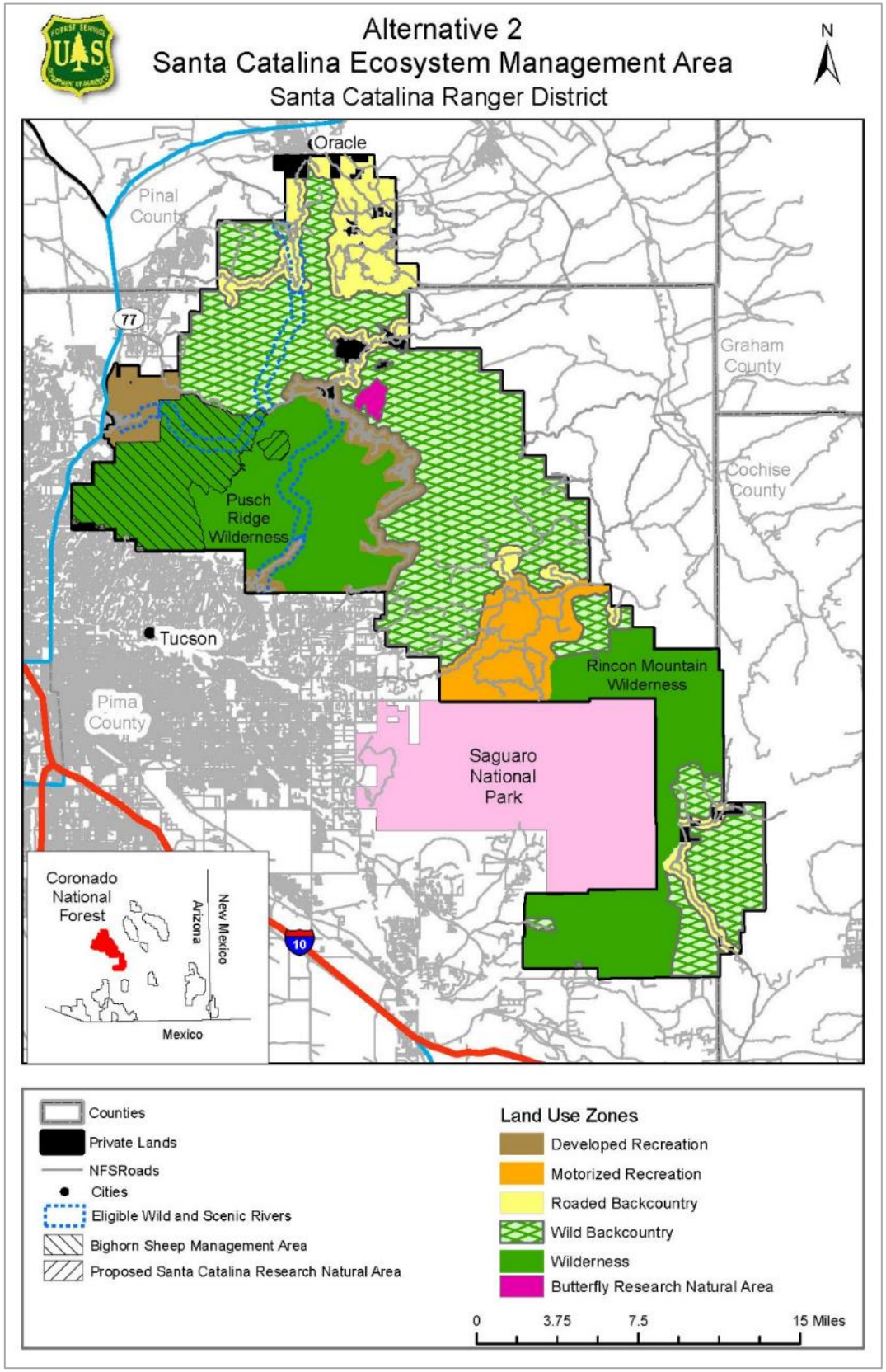

Figure 59. Land use zones and special areas in the Santa Catalina Ecosystem Management Area as proposed by alternative 2